Food Packer

The National Magazine of Production and Management

Canning Glasspacking Freezing

September, 1955

Man-of-the-Month:
J. R. Simplot

- Largest Pineapple Canner in U. S.–*Page 22*
- Quality of Frozen Peaches and Nectarines–*Page 28*
- Mario Packs Olives at Low Cost and Price–*Page 34*
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A Vance Publication

"Homework"

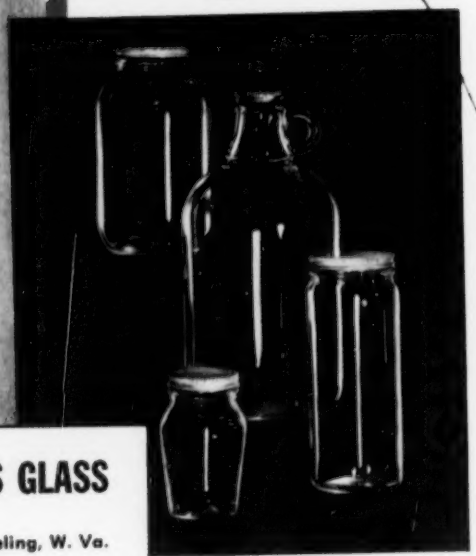
Peanut Butter
Olives
Coffee
Strawberry Jam
Mustard
Trench Dressing

H-A can't help junior with his homework, but we can certainly help you . . . help mother with hers.

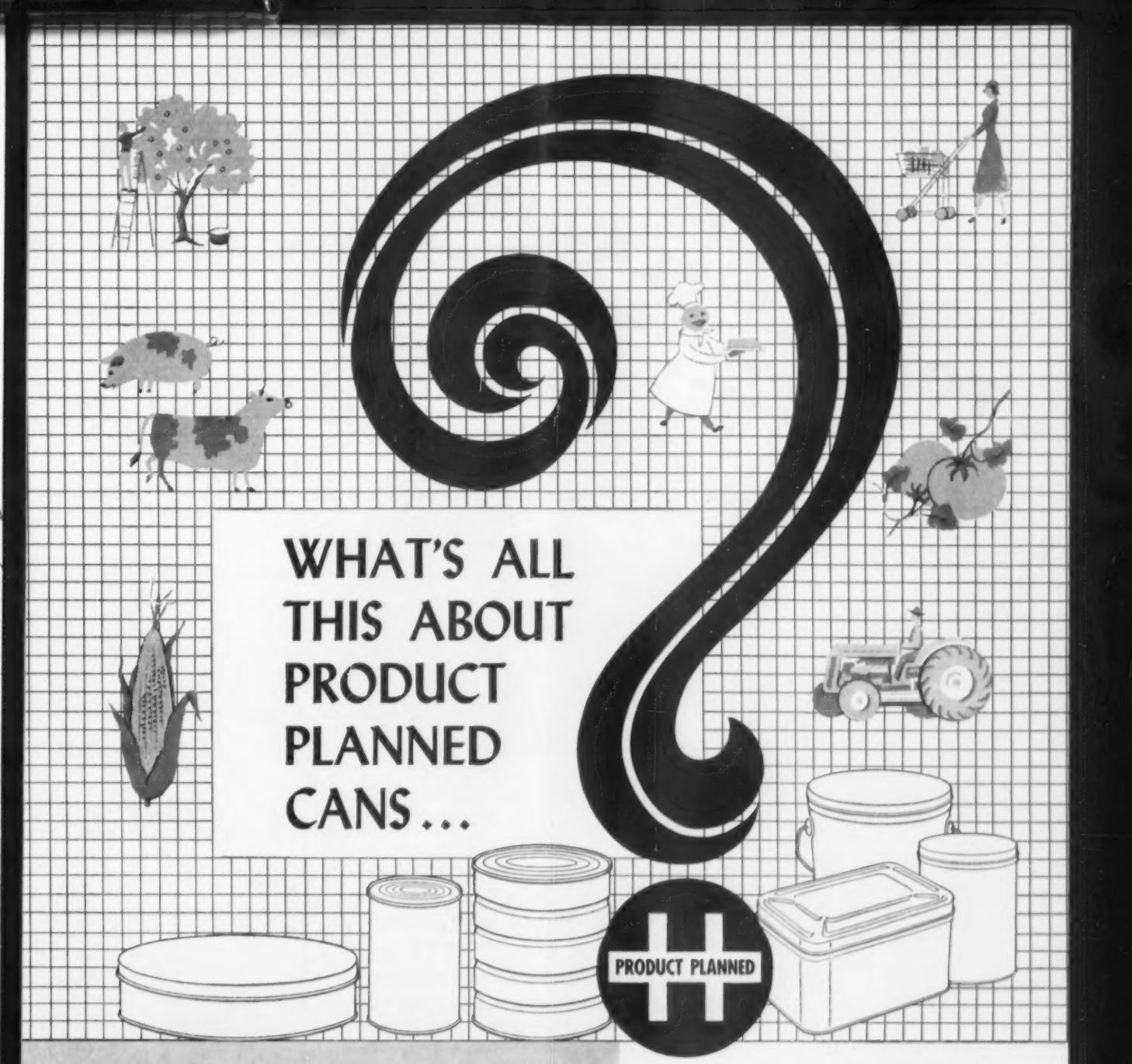
With the added chores of the school year and the many obligations of the fall and winter season, Mrs. Consumer's shopping list takes on greater proportions.

It's the job of every **H-A** glass container to present your products at their wholesome best so that her selection is made easily.

H-A designers study her problems as well as yours, for it is a MUST with them, as with every person in our forty-one factories and sales offices (there is one near you), that **H-A** means **Home Approved.**



HAZEL-ATLAS GLASS COMPANY Wheeling, W. Va.



HEEKIN

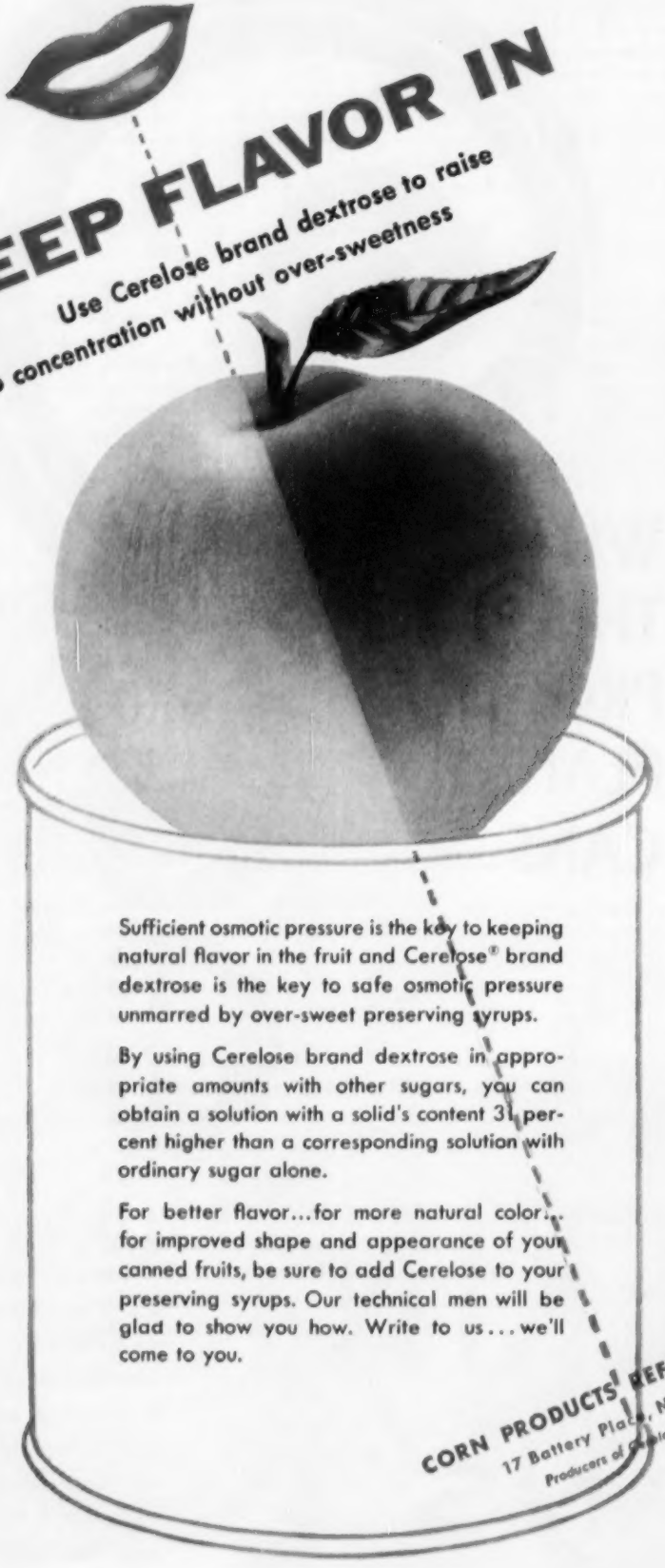
PRODUCT PLANNED CANS

THE HEEKIN CAN CO. *PLANTS AT CINCINNATI & NORWOOD, OHIO; CHESTNUT HILL, TENNESSEE; SPRINGDALE, ARKANSAS*

YOU'RE going to hear a lot about **Heekin Product Planned Cans** in your industry. Do you know about the constant research that forms the basis for product planning? Heekin has perfected formulas to meet about every problem in the economical metal packaging of your product. Heekin's fifty-four year experience in can manufacturing guarantees you cans when you want them. Call in Heekin the next time you order cans. ***Plain or lithographed*** **Heekin Cans are *Product Planned* for your product and your *profit***

TO KEEP FLAVOR IN

Use Cerelose brand dextrose to raise syrup concentration without over-sweetness



Sufficient osmotic pressure is the key to keeping natural flavor in the fruit and Cerelose® brand dextrose is the key to safe osmotic pressure unmarred by over-sweet preserving syrups.

By using Cerelose brand dextrose in appropriate amounts with other sugars, you can obtain a solution with a solid's content 31 per-cent higher than a corresponding solution with ordinary sugar alone.

For better flavor...for more natural color... for improved shape and appearance of your canned fruits, be sure to add Cerelose to your preserving syrups. Our technical men will be glad to show you how. Write to us... we'll come to you.

CORN PRODUCTS REFINING COMPANY
17 Battery Place, New York 4, N. Y.
Producers of Cerelose brand dextrose

Food Packer

September, 1955

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Lorraine Camper, Associate Editor
Dr. W. A. Gould, Quality Control Editor
Robert Y. Kerr, Washington Editor
R. B. Lundahl, Advertising Production
Elmer O. Olin, Circulation Manager

Events to Come

Oct. 7-8. Texas Canners Association, annual meeting, Ancira Hotel, Monterrey, Mexico.

Oct. 13-15. Florida Canners Association, annual meeting, Fontainebleau Hotel, Miami Beach.

Oct. 19-21. National Pickle Packers Association, annual convention and "Pickle Fair," with machinery exhibit, Sheraton Hotel, Chicago.

Oct. 23-25. Third Annual Western Regional Frozen Food Convention, Hotel Mark Hopkins, San Francisco.

Nov. 3. Illinois Canners Assn., fall meeting, Bismarck Hotel, Chicago.

Nov. 3-4. Ozark Canners Association, 1955 fall meeting, Colonial Hotel, Springfield, Mo.

Nov. 7-8. Wisconsin Canners Assn., annual convention, Schroeder Hotel, Milwaukee.

Nov. 12-20. Washington Food Show Corp., first annual show, National Guard Armory, Washington, D. C.

Nov. 16-18. Indiana Canners Association, annual convention, French Lick Springs Hotel, French Lick, Ind.

Nov. 21. Pennsylvania Canners Association, 41st annual convention, Penn Harris Hotel, Harrisburg.

Dec. 1-2. Tri-State Packers' Association, 52nd annual convention, Benjamin Franklin Hotel, Philadelphia.

Dec. 5-6. Michigan Canners and Freezers Association, fall meeting, Pantlind Hotel, Grand Rapids.

Dec. 5-6. Ohio Canners Assn., annual convention, Carter Hotel, Cleveland.

Dec. 6. Maine Canners Assn., annual meeting, Falmouth Hotel, Portland.

Dec. 7-9. Western Frozen Food Processors Association, Hotel Senator, Sacramento, Calif.

Dec. 8-9. New York State Canners and Freezers Association, Inc., 70th annual convention, Hotel Statler, Buffalo.

Jan. 18-23, 1956. National Canners Association, National Food Brokers Association, and Canning Machinery & Supplies Association, annual meeting, Atlantic City, N. J.

Jan. 29, 1956. Frozen Food Convention, N.A.F.F.P. and N.A.F.F.D., Waldorf Astoria Hotel, N.Y.C.

Feb. 1-3, 1956. Eleventh annual fieldmen's conference, Pennsylvania Canners Association, Pennsylvania State University, University Park.

Feb. 17-18, 1956. Canners League of California, annual fruit and vegetable sample cutting, Fairmont Hotel, San Francisco.

control's the thing...

WITH ANCHOR HOCKING, TOO

Anchor® Metal and Molded Closures provide dependable, attractive and efficient seals—their uniformly high quality a result of exacting quality controls.

50th Anniversary

The archer must have a steady hand, a sharp eye, to give him the perfect *control* that makes him a master. And *control* is important, too, in the manufacture of Anchor Hocking quality products.

From the selection of all raw materials to the final production line inspection, Anchor Hocking employs literally hundreds of exacting *controls*, tests and checks involving many scientific testing devices. Although each factory maintains a laboratory of its own for quality control purposes, central laboratories at Lancaster, Ohio, serve as a control center for all—veritable watchdogs that make certain Anchor Hocking products comply with their rigid specifications.

Eleven strategically located factories and sales-service representatives in 25 principal cities in the U. S. and Canada await the opportunity to serve you with controlled high quality Anchor Hocking products.

Closure coatings are tested and evaluated with an abrading instrument to make certain they comply with rigid quality control specifications.

Caps removed from production are gage-checked for height, turnover, skirt height and diameter, at regular intervals, to maintain uniform quality.

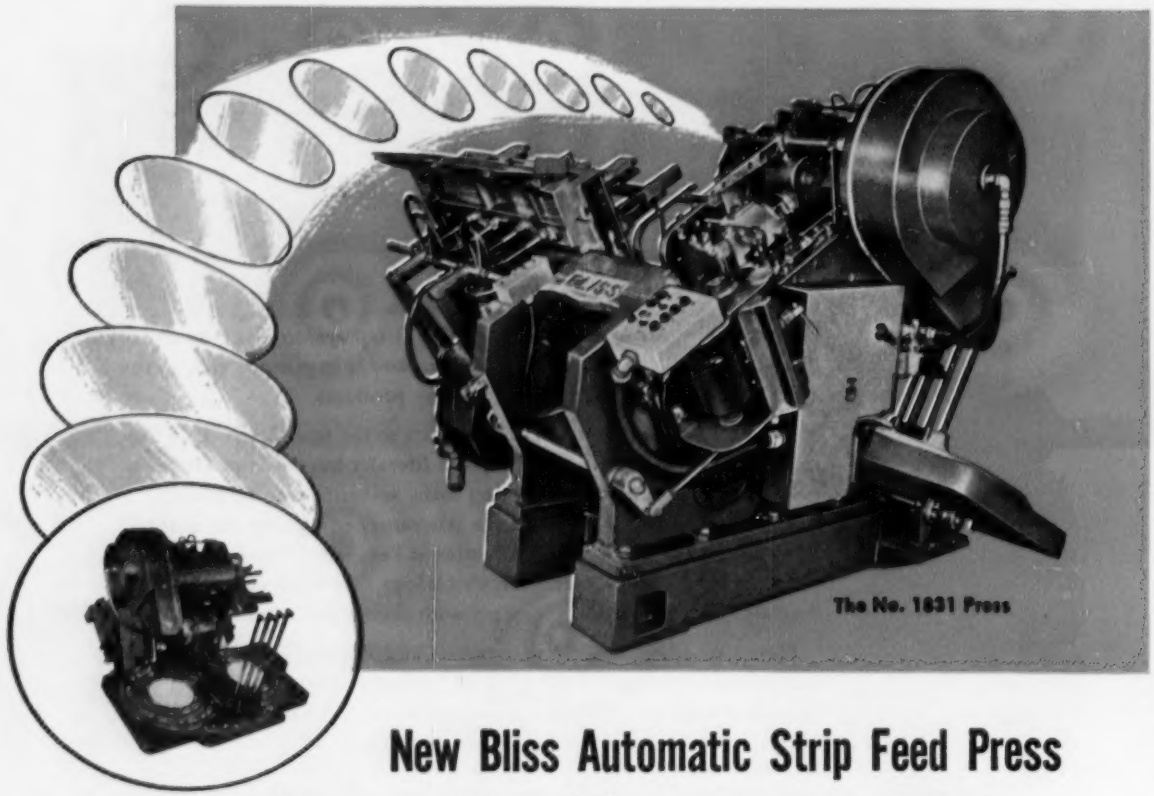
Specially trained inspectors guard closure quality through careful examination and strict inspection of Anchor Caps before packing and shipping.

ANCHOR HOCKING

GLASS CORPORATION

GENERAL OFFICES — LANCASTER, OHIO

Anchorglass Containers, Anchor Metal and Plastic Closures, Anchor Sealing Machines, Cartons and Package Engineering Service... for Packers, Manufacturers, Bottlers of Foods, Drugs, Household Chemicals, Cosmetics, Toiletries, Beverages, Beers, Ales, Wines and Liquors.



New Bliss Automatic Strip Feed Press will deliver more than 300 strokes per minute!

From the ground up, it's been engineered to slash maintenance needs and boost production speeds

You wanted speed in your strip feed presses—reliable speed! And here it is: to 300 strokes per minute (or more, depending upon can size), more than 18,000 strokes per hour all day long—without time-wasting stoppages for re-adjustment and repair.

One of the major features of the new Bliss press is its precision counter-balanced crank-shaft and feed bar crank which holds vibration to an almost irreducible minimum and thereby permits smooth, quiet operation at high speed.

Other features: combination disc friction clutch and brake—permits instant starting • feed bar is driven by crank instead of lever—and has adjustable fingers • a bigger bolster plate • no idle strokes between strips, if desired • slide stops instantly at top of stroke.

You'll want to know more about these developments. For complete details, write, wire or phone

E. W. BLISS COMPANY
General Sales Office:
50 Church St., N.Y. 7, N.Y.
CAN MACHINERY DIVISION
Hastings, Michigan

BLISS
SINCE 1857

is more than a name...*it's a guarantee*

BLISS CAN AND CONTAINER MAKING MACHINERY

SLITTERS

BODYMAKERS

FLANGERS

SEAMERS

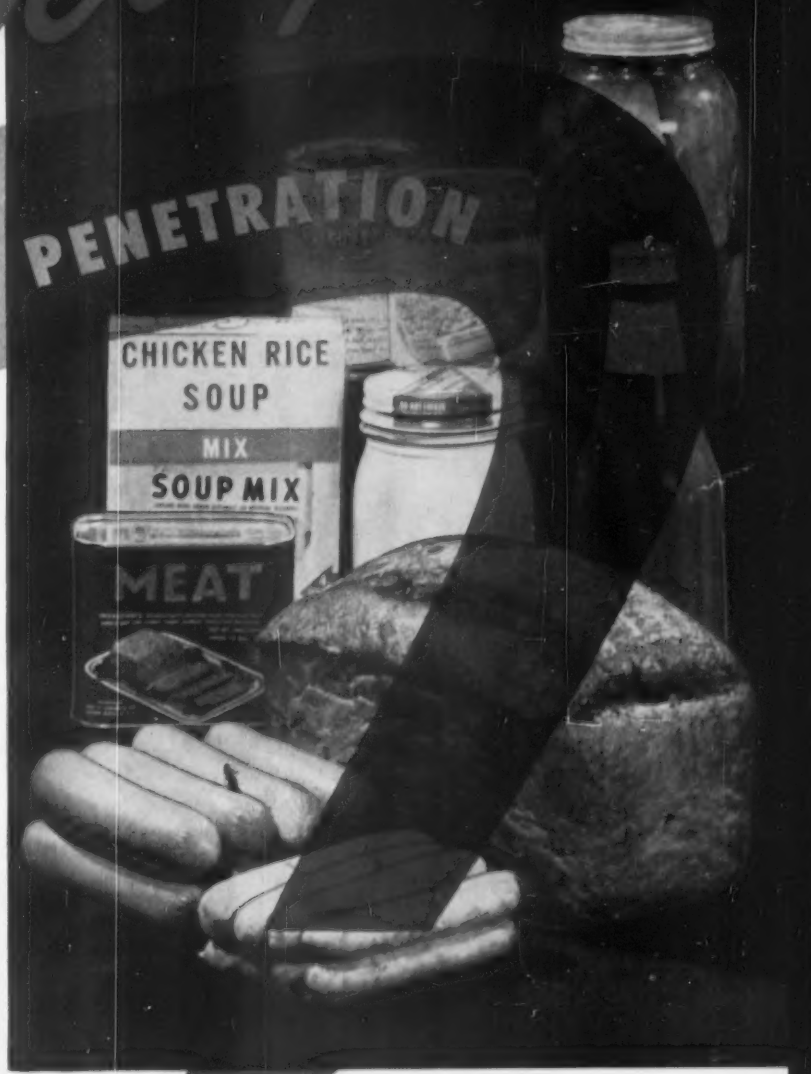
TESTERS

STRIP FEED PRESSES

TRUE PEPPER FLAVOR AT ITS ROYAL BEST

Pepperoyal®

Solubilized for PENETRATION



PEPPEROYAL is one of many, widely-used but unheralded Griffith spices! It is widely used in quality food products because of its *true pepper flavor* . . . extracted by Griffith from prime quality black pepper.

PEPPEROYAL is widely used . . . alone or as one spice in Griffith Solubilized Seasoning formulae . . . because the Griffith process of Solubilizing gives you *true pepper flavor* in a form that assures *penetration!*

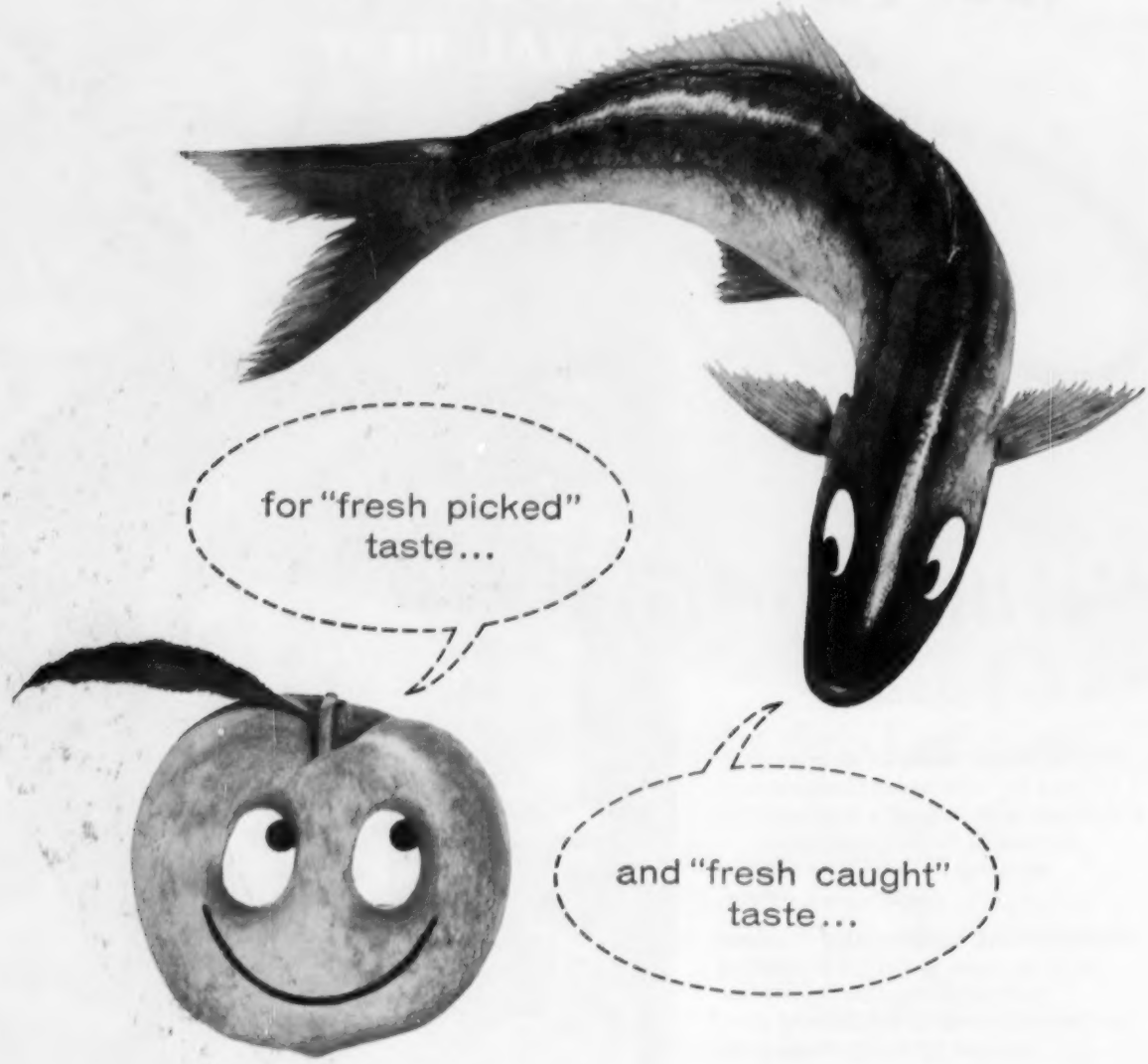
Penetration is the *crucial* quality in flavor control! PEPPEROYAL has that quality . . . the full flavor content disperses easily and blends thoroughly with your product—because it is *Solubilized!* Only Griffith produces PEPPEROYAL.

Only Griffith can assure you of controlled, *uniform* flavor from the pepper berries to your finished product. Order dependable PEPPEROYAL today.

The GRIFFITH LABORATORIES

(Every seasoning formula—even yours—can be Solubilized. Converting ground spice formulae to Solubilized Seasonings is a Griffith specialty. Let us show you all advantages.)

CHICAGO 9, 1415 W. 37th St. • NEWARK 5, 37 Empire St. • LOS ANGELES 58, 49th & Gifford Sts. • TORONTO 2, 115 George St.



protect your frozen packs with...

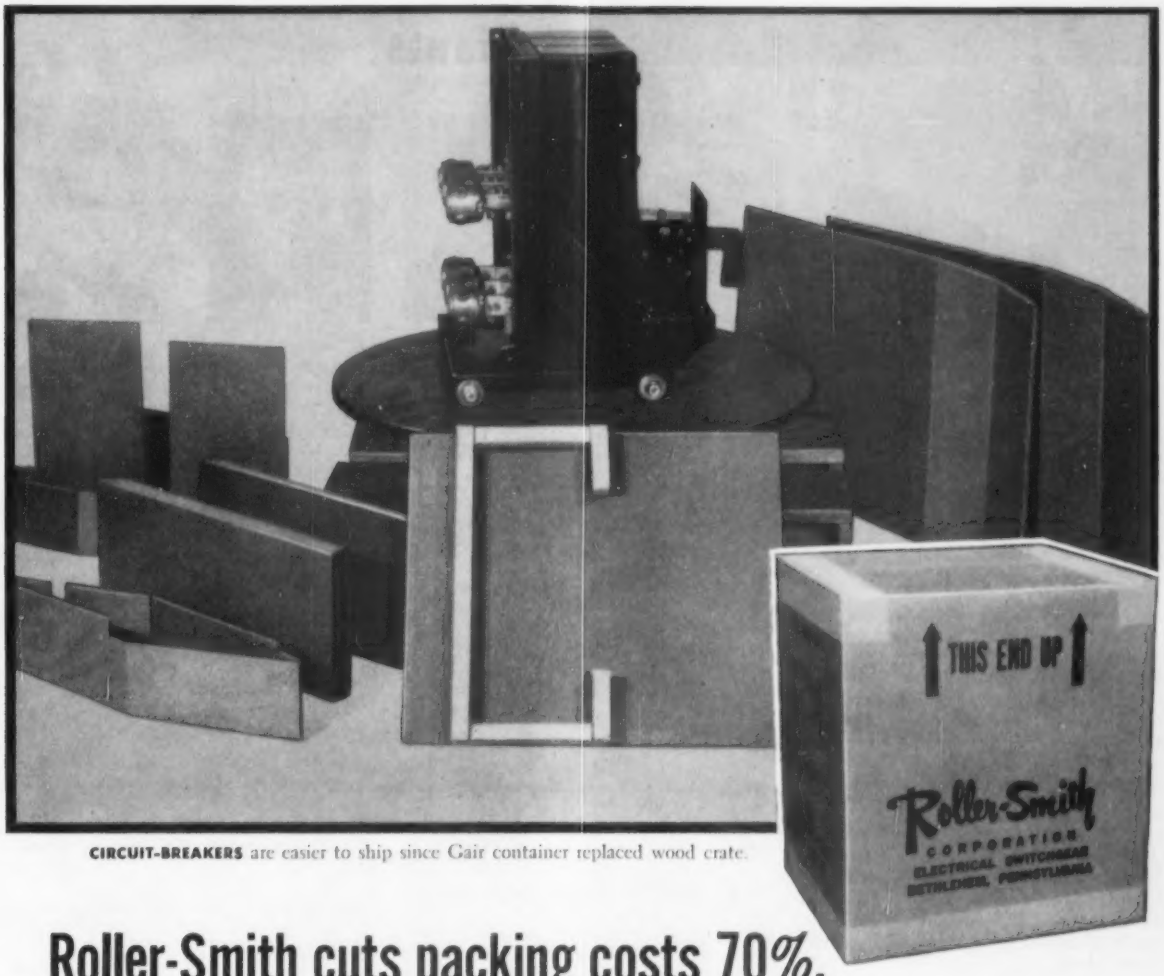
PFIZER ASCORBIC ACID

When you process your packs with Pfizer Ascorbic Acid you help prevent flavor and color loss...for a *fraction of a cent* per pound. **In fish,** natural colors are preserved...rusting of the fatty portion is prevented. The Ascorbic Acid inhibits oxidation...reduces complaints of harsh, rancid tastes. **In fruits** such as peaches, cherries, apricots, apples, both Pfizer Ascorbic Acid and Ascorbic-Citric Mixtures are highly effective in preventing off-colors and off-tastes. Result? Your products build repeat sales. For complete processing data, write for Technical Bulletins 28 (frozen fish) and 70 (frozen fruit).

Manufacturing Chemists for over 100 Years

Pfizer

CHAS. PFIZER & CO., INC.
Chemical Sales Division
630 Flushing Ave., Brooklyn 6, N. Y.
Branch Offices: Chicago, Ill.; San Francisco, Calif.; Vernon, Calif., Atlanta, Ga.



CIRCUIT-BREAKERS are easier to ship since Gair container replaced wood crate.

Roller-Smith cuts packing costs 70%, shipping weight 27½% with new Gair Container

These percentages are based on actual time studies run by Roller-Smith Corporation, Bethlehem, Pa., on the packing of their heavy circuit breaker.

Cutting lumber, assembling a wooden crate and packing used to take 57 minutes. With the new Gair container the job takes only 17 minutes — a 70% reduction. Material costs also dropped 9¾%, and net shipping weight of the container plummeted 27½%.

What's more, the Gair container has chalked up an excellent record for protection in transit, as well as guarding against loss of accessories often included in shipments. Extra dividends include:

- *advertising* value of Gair's printing
- *dust protection* of Gair's sealed construction
- *elimination of safety hazards* in handling wood
- *reduction* of required storage space

Maybe there's some way Gair could improve your product's shipping container. How about calling your nearest Gair container plant and finding out?

YOU'RE LIVING NEXT DOOR TO THE EXPERT

GAIR CONTAINER PLANTS: Atlanta, Ga. • Cambridge, Mass. • Cleveland, Ohio • Holyoke, Mass. • Jackson, Miss. • Los Angeles, Cal. • Martinsville, Va. • New Orleans, La. • No. Tonawanda, N.Y. • Philadelphia, Pa. • Plymouth, Mich. • Portland, Conn. • Richmond, Va. • Syracuse, N.Y. • Interboro, N.J.

SINCE 1864

GAIR

SHIPPING CONTAINERS • FOLDING CARTONS
PAPERBOARD • KRAFT BAGS AND WRAPPINGS

ROBERT GAIR COMPANY, INC. • 155 EAST 44TH STREET • NEW YORK 17, N.Y.

SC58

People and Plants

Henry Cragg

F. W. Adams

C. L. Hankinson

D. G. Wilkinson

W. E. Shollenbarger

C. P. Jones

Henry Cragg has been elected to the new post of administrative vice president of **Minute Maid-Snow Crop Frozen Foods**. Cragg joined Minute Maid in 1946.

Continental Can Co. has named **Dr. Frederick W. Adams** as director of the department of chemistry of its central research and engineering division. Dr. Adams was formerly research and development director of the company's Millsplastic division. **D. N. Rabishaw** has been named manager of purchases for Continental's coatings and chemical products, and **J. J. Sherlock** has been appointed manager of purchases for paper and petroleum products.

Dr. C. L. Hankinson has been appointed vice president, manager, and technical director of **Tony Downs Foods Co.**, St. James, Minn., producer of **Duncan Hines** frozen poultry products. The company also announces the appointment of **Nelson S. Carpenter** as manager of its frozen foods plant.

Donald G. Wilkinson has joined the staff of **Crites Moscow Growers** as eastern representative. Wilkinson replaces **Harry Neumann**, now with **Trappe Frozen Foods**, and will headquarter in Baltimore.

William E. Shollenbarger, treasurer of the **Real Gold Co.**, California fruit juice processing firm, has been named vice president in charge of finance. **Norman P. Marshall** has been appointed assistant general sales manager of the company, retaining his title as national advertising and sales promotion manager.

Christopher P. Jones has been appointed sales manager of the Plastafol department, folding cartons division, **Robert Gair Co., Inc. Stafford D. Collie** has been appointed art director of Gair's container division.

William B. Bangerter has been named western sales manager of the kitchen equipment department of **Food Machinery & Chemical Corp.**'s Canning Machinery Division.

John C. Miller was elected president of **Berlin Chapman Co.**, Berlin, Wis., at the recent board of directors meeting. Miller has been the executive vice president of the company and succeeds **W. Mead Stillman**, president since 1944.

Thomas G. Harrison has been elected to the board of directors of the **Green Giant Co.** Harrison is president of **Super Valu Stores, Inc.**, Minneapolis.

C. L. Rumberger, vice president in charge of research and quality control, **H. J. Heinz Co.**, and a member of the firm's board of directors, has been elected a member of the **Agricultural Department Committee** of the **U. S. Chamber of Commerce**.

Albanus Phillips Jr. was elected president of the **Phillips Packing Co., Inc.** at the company's annual meeting held recently at the main office in Cambridge, Md. **Theodore Phillips** was elected executive vice president, and **L. B. Phillips Jr.** and **W. G. Winterbottom Jr.**, vice presidents. **Robin M. Kirwan, E. C. Hopkins Jr.**, and **C. Richard Drescher** were elected vice presidents in charge of production, sales, and frozen foods, respectively. Other elections: **Harold D. Shriver**, treasurer; **Chas. D. Spedden**, assistant treasurer; **Warrington Harris**, secretary; **Calvin W. Mowbray**, assistant secretary; **Albert E. Lankford**, comptroller; **McCoy A. Tall**, chief engineer; and **Dorsey E. Davis**, superintendent of construction and maintenance.

Percy C. Magnus, president, and **Dr. Henri F. Logcher**, export manager, **Magnus, Mabee & Reynard, Inc.**, will sail on the *S. S. United States* September 2 for England and the Continent. They will confer with company agents and customers as part of a drive to increase MM&R's already important European market. The trip is coordinated with the MM&R Diamond Jubilee.

John Blankenship has been named manager of the Ottumwa plant of **John Morrell & Co. Claude A. Scott** has assumed duties as sales manager of the company's metropolitan sales division, and **Kelly C. Warden** has been appointed sales manager of the midwest division.

Gilbert S. McInerny has been elected secretary of **American Home Products Corp.** McInerny joined the company's legal department in 1941.

William C. Foster, former Deputy Secretary of Defense and president of the **Manufacturing Chemists' Association, Inc.**, will become an executive vice president of **Olin Matthieson Corp.**

The Florida Citrus Commission has named **Harry D. Hallam**, merchandising representative in the Detroit area, as winner of the commission's new customer contest held during the month of July in the central division area. Hallam, with the commission since April, 1954, secured 21 new users for Florida canned and frozen grapefruit sections among restaurants and soda fountains throughout his district.

The board of directors of the **New York State Canners and Freezers Association, Inc.** announces the election of **Northern Wayne Cooperative, Inc.**, Williamson, N. Y., successor to **Walt Wegner Foods, Inc.**

The following firms have been elected to membership in the **National Frozen Food Distributors Association** during the second quarter of 1955: **Frozen-Rite Products, Inc.**, 1709 Forest Ave., Dallas 15, Tex.; **Lamb-Weston, Inc.**, P. O. Box 118, Weston, Ore.; **North Pacific Canners & Packers, Inc.**, 412 Builders Exchange Bldg., Portland 4, Ore.; **Quick Frozen Foods, Inc.**, Strauss St., Tupelo, Miss.; **Rubenstein & Sons, Inc.**, 1111 Hall St., P. O. Box 687, Dallas, Tex.; **S. B. Thomas, Inc.**, 33-01 Queens Blvd., L. I. C. 1, N. Y.; **Downyflake Breader Mix Div., Doughnut Corp. of America**, 45 W. 36th St., New York 18; **Milprint, Inc.**, 4200 N. Holton St., Milwaukee 1; **Standard Casing Co., Inc.**, 121 Spring St., New York 12; **Certified Grocers of California, Ltd.**, 2601 So. Eastern, L. A. 22; **General Ice Cream Corp.**, 323 Commercial St., Portland, Me.; **LaSalle Foods, Ltd.**, 771 William St., Montreal 3, Que.; **Lone Star Food Co.**, 400 So. 20th St., Waco, Tex.; **Miller Produce Co.**, 85 Newmarket Sq., Boston 18; **United Foods, Inc.**, 1112 So. Central Expressway, Dallas; **Wakefern Food Corp.**, 715 South Ave., E., Cranford, N. J.; **Tropical Ice & Cold Storage Co.**, 601 American Bank Bldg., New Orleans 12, La.; **Merrifield Trucking Co.**, 1122 N. Lemon St., Anaheim, Calif.; **Pacific Intermountain Express Co.**, 299 Adeline St., P. O. Box 958, Oakland 4, Cal.

DAY OR NIGHT

PICK SWEET CORN WHEN THE TIME IS RIGHT!

NEW '55 FMC SWEET CORN HARVESTER LETS YOU PICK 'ROUND THE CLOCK —WHEN THE CORN AND YOUR PLANT ARE READY

Save minutes and dollars with the rugged FMC Sweet Corn Harvester, the only machine specifically designed for sweet corn harvesting. Reliability and dependability are proved by performance records season after season, under all conditions—in heat, dust, rain, rough fields—in night and day operation.

Minutes mean quality, for corn must be picked when it's ready! Picking delays and interruptions common to hand picking operations downgrade product quality and disrupt plant schedules. That's why each season finds more growers switching to FMC Sweet Corn Harvesters, always dependable, always on the job when there's picking to be done.

Minutes mean profits. One FMC Harvester replaces 10 to 15 hand pickers, with a reduction of up to 57% in picking costs! There's a 10% bonus in increased cut-off weight—up to 10% more corn per ton over hand picked corn. In addition, smooth, more profitable plant scheduling is assured.

Now is the time to order your FMC Sweet Corn Harvester for consistently higher yields at lower costs.

1st Choice of Canners, Growers, Operators!

- Cuts picking costs up to 57%
- Delivers 10% more cases of "cut-off" corn to the cannery—less green weight
- Works day and night, under all weather conditions
- Reduces labor problems—does the work of 10 to 15 hand pickers
- Mounts on most tractors
- Simple operation, with all controls convenient to driver
- Sturdy construction throughout for trouble-free operation, lowest maintenance

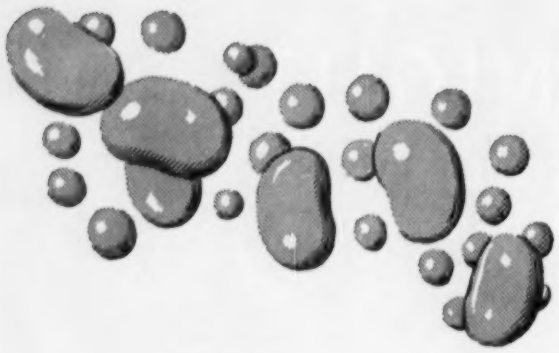
FOOD MACHINERY AND CHEMICAL CORPORATION

Canning Machinery Division

General Sales Offices:
WESTERN: SAN JOSE, CALIF. • EASTERN: HOOPESTON, ILL.

fmc FOOD MACHINERY AND CHEMICAL CORPORATION

Key to food equipment



Hulling Machinery

For Threshing Green Peas
And Lima Beans — That's
Our DAILY FOOD At

HAMACHEK

Hulling Equipment for the threshing of Green Peas and Lima Beans is our food—morning, noon and night. It alone has nourished our business and made it grow.

Because of our complete dependence and concentration on this type of equipment, we have learned a tremendous amount about it.

Each year more Canners and Freezers use larger quantities of our economical hulling equipment.

Frank **HAMACHEK**
MACHINE COMPANY
Established 1880 **Kewaunee, Wisconsin**
PEA AND BEAN HULLING SPECIALISTS

Washington and You

Robert Y. Kerr, Washington Editor

FDA Plans Events for 50th Anniversary Celebration

THE FOOD AND DRUG ADMINISTRATION plans a series of events to celebrate its fifty years of service. June 30th of next year will be the anniversary of Theodore Roosevelt's signing of the Act creating the agency, and the Association of Food and Drug Officials will handle most of the events marking the date. There'll be a special seminar at the annual meeting in New York on May 7, and a banquet in Washington on June 30, the signing date. Each of the seven districts of the Association will hold its own celebration on different dates. Special tributes will be paid to the pioneers of Food and Drug control, notably Dr. Harvey W. Wiley. Eugene H. Holeman, president of the Association of F & D Officials, and George P. Larrick, commissioner of the FDA, will of course, be prominent in the series of events.

The Agency plans to give special recognition to the food, drug, and cosmetic industries whose co-operation has aided so greatly in making the foods, drugs, and cosmetics of the United States the best in the world.

"After" Pictures of Nuclear Explosion

This page saw a series of colored slides of the test houses and the stored food exposed to the nuclear explosion at the Nevada test site a relatively short time ago. This was a 35-kiloton bomb, which in the patronizing speech of the nuclear bombardiers is a "pipsqueak" affair. But judging by the "after" pictures, it's nothing your correspondent would want to meet in a dark alley, or anywhere else.

Dr. Edwin P. Laug, project director for tests of the effects of the explosion on food-stuffs, explained the pictures and some of the preliminary conclusions to a meeting of Food and Drug Administration staff members, Department of Agriculture people, and news correspondents.

Feeding tests are in progress and will be continued for a couple of years, with some ten dogs, sixty rats, and a number of monkeys as star boarders. These animals doubtless think they're living the life of Riley and probably are wondering how long this has been going on. They should remember Virgil's wisecrack of some 2,000 years ago: *"Timeo Danaos et dona ferentes."* A thumb-handed translation would be, "Better watch out for experimental scientists when they pick up the dinner check."

Dr. Laug made a few preliminary statements, one to the effect that any food, located a mile or more from ground zero and found with containers intact, may be considered safe to eat. Similar intact packages a quarter-mile from ground zero are not quite so safe; but the Doctor added that if it's a matter of threatened starvation, it's better to eat the food than to risk perishing of hunger. It seems there's some danger that certain foods containing sodium or several other chemicals may become radioactive by induction. Dr. Laug mentioned one other danger.

He has discovered slivers of glass that had been driven through tin containers. The glass fragments, from shattered windows, are dangerous in themselves; and the penetration of the can exposes the contents to contamination. Also, the blast may loosen the caps on jars, exposing the food to contamination.

In general, food containers stored in basements, even on open shelves, came through the blast in usable condition. Even when the test houses came down in heaps of rubble, the food containers when dug out were mostly intact and the food was edible. Dr. Laug said this is important. He supposed an example: If a bomb were to hit the South Department of Agriculture building, on 14th street where the lecture was given, it doubtless would wreck the food warehouses on 12th street. But intact food containers dug out of the warehouse rubble would be of top importance in feeding the city's survivors. The study of soft drinks exposed in containers to the blast is considered highly important since in some instances they might be the only substitutes for drinking water in the event of a bomb disaster. People can live a good many days without food; much longer than without water or a substitute drink.

The Department of Agriculture people say there's going to be a big production of food this season, although continued heat and a shortage of rain could change the estimates in certain lines. These experts think that even with heavy production the prices to consumers will show little more than the usual slight seasonal decline during the remainder of the year. Eggs–lower production than last year and prices notably higher; fresh milk–supply about equal to last year's; butter–plentiful, with possibly a slight increase in price. Margarine–prices will increase a little; apples–average crop; potatoes–abundant crop, declining prices; canned peas–larger pack than last year, prices about the same; coffee–larger supply, and prices may decline a little; sugar–surplus supply, with prices about same. Farmers will have a continuing decline in income.

The Pesticide Law in Operation

There's a current disagreement over a certain pesticide that this page will mention by name; the purpose being not to deal with this particular chemical but to illustrate in a way the methods of operation under the current laws. This preparation is a miticide placed on the market prior to the enactment of the present law of pesticides. Apparently it was originally intended for use on roses and other flowers, but has since been used on fruits, such as cherries. The producing company filed the usual petition for tolerance and later filed an amended petition.

Laboratory tests indicated that food containing a heavy residue of the pesticide, when fed to test animals, appeared to produce cancerous developments. It seems that similar tests, with light residues, have not been run. But, on the findings it already had, the FDA ruled that the residue tolerance on fruits and vegetables intended for human consumption must be set at zero. This does not mean that the chemical can't be used upon products for human consumption; but it does mean that no food product can be handled in interstate commerce if it carries any residue at all of the pesticide.

The company had already made a good many tests of its own, and upon the basis of those findings had invested large sums of money in the producing plant. It insists that the zero residue ruling is unjustified and unnecessary; so, as provided under the law, the question has been referred to an advisory committee, chosen by the National Academy of Science. We are told that the people chosen are noted scientists. This committee has met, but at the present writing it has filed no formal report.

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Scienco Salt Tablets are available in 10-grain to 400-grain sizes . . . can be easily stored from season to season with no danger of contamination.

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A Scientific or Morton Consulting Engineer in your area will be happy to give you more information about Scienco Salt Tablets and the Tablet Depositor. He will also be happy to explain the Bulk Salter and Brinemaker methods of salting. For complete information about the service and salt offer, write:

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A Delicious Seafood Dinner In a Can!

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CROWN cans today are the best that can be made. And Crown's unprecedented continuing expansion of resources and facilities hails a new era of creative Service to food packers on the broadest scale. Not only Lithography, but Research, Plant Layout, Engineering, Product Development, etc. Ask about them!

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"Big Enough to Serve You . . . Small Enough to Know You"

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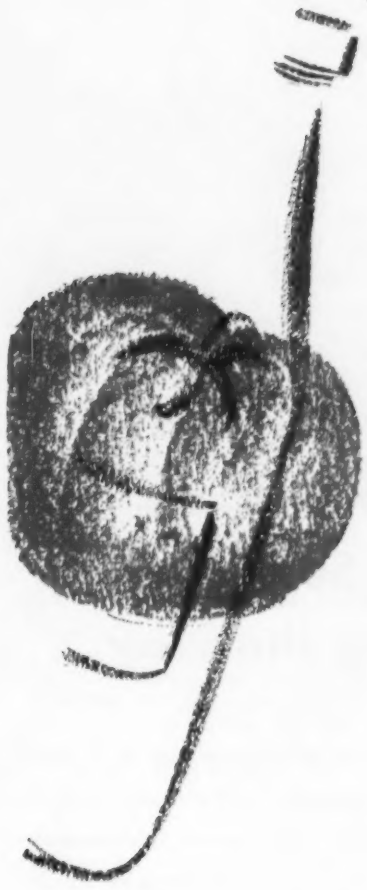
The Taste of Success in CATSUP is an individual matter!



Some like it tart, some sweet . . . some like it spicy, some smooth . . . and still others request any one of the myriad shades of differences and combinations in between! Sectional preferences play an important part, and whatever type of product is manufactured . . . the processor must assure his customers of the same previously accepted flavor, pack after pack. To do this, he must have a seasoning that is first individually tailored to his specific requirements, and second, stabilized at this standard and kept constantly uniform at all times. D&O can provide such seasonings . . . in either water-soluble (SPICEOLATE) or dry-soluble (SPISORAMA) form, whichever is most convenient to your operation. Formulations can be varied to meet any manufacturer requirement . . . and the services of the Product Development Labs are available for individual testing. Consult D&O.

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This year, Continental service experts will travel tens of thousands of miles to help our packing customers keep filling and closing operations at peak efficiency. Let us start you off with on-the-button deliveries of all the precision-made cans you need. Then, see how we follow through with the offer of research and engineering tailored to suit your individual situation. Call Continental soon.

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TAILOR-MADE PACKAGE SERVICE

SEPTEMBER, 1955 **Food Packer** VOL. 36, No. 9

CANNING • GLASSPACKING • FREEZING

BETWEEN THE LINES

Crossett Succeeds Schaal As *Food Packer* Editor

James W. Crossett joins *Food Packer* as editor succeeding Bill Schaal who has resigned to join the Foreign Agricultural Service of the U. S. Department of Agriculture, in Washington.

Crossett brings to *Food Packer* over 15 years of editorial background with such organizations as the *Milwaukee Journal, Minneapolis Times, Esquire,* and recently as editor of *Railway Freight Traffic,* a Simmons-Boardman publication. He is a graduate of the University of Minnesota, married, has an 18-year-old daughter, and makes his home in Hinsdale, Ill. He owns two farms and has a broad knowledge of canning crops.

Panel Will Discuss Fire Hazards in Food Industry

A panel discussion on fire and explosion hazards in the food industry will be a principal topic at the opening food industry safety session at the 43rd National Safety Congress and Exposition to be held in Chicago, Oct. 17-21.

The panel, scheduled for Monday afternoon, Oct. 17, will be moderated by John J. Ahern, professor and director, fire prevention and safety engineering, Illinois Institute of Technology.

The various divisions of the National Safety Council's food section will conduct round table discussions on Tuesday, Wednesday, and Thursday mornings.

"Buddy System" Advised For Cannery Workers

Some of the electrical problems in food processing plants, stemming from the peculiar nature of the business, were pointed out to the Pacific General Meeting of the American Institute of Electrical Engineers in Butte, Mont., Aug. 16. Use of the "buddy system" was advised for those working on electrical machinery.

The "buddy system," R. S. Wilson, Richmond, Cal., explained, is the habit of working with someone nearby who can be of assistance in case of trouble. Mr. Wilson is electrical engineer for the California Packing Corp., San Francisco.

Water, chemicals, steam, and acids create hazardous conditions, damaging electrical machinery, which in turn may become dangerous to employees, Mr. Wilson said. Dangerous practices, such as ignoring safety precautions, defeating safety devices, and improper clearance of power lines, also contribute to hazardous conditions, he said.

Mr. Wilson's paper, "Electricity in the Cannery", discussed the various electrical problems in designing power systems for the canning industry and made the following points of "unusual importance to the designing engineer:

1. "Utmost economy consistent with a fairly high degree of reliability is paramount. This means that components must be reliable but unadorned with non-productive embellishments.

2. "Moisture has to be contended with throughout most of the plant, and the design should be such that either the moisture is kept out or that almost submersible equipment is used.

3. "The effect of various chemicals which are present in the cannery must be kept in mind when choosing various materials and finishes.

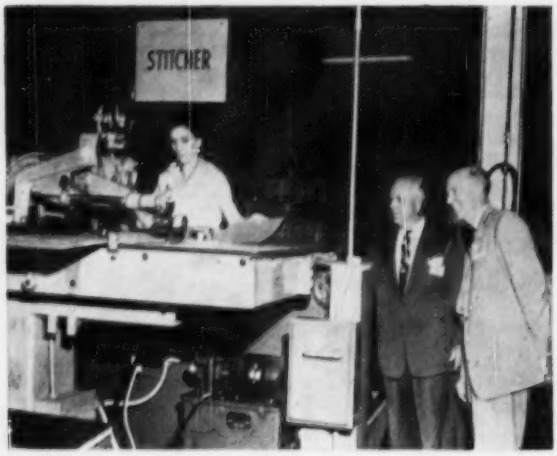
4. "Differences of temperature and humidity which may not be very noticeable to the casual visitor can be very detrimental to the equipment by transmission of moisture through conduit.

5. "Every possible safety feature should be kept constantly in mind during design work because the feverish tempo of the operating season and the large numbers of electrically unskilled workers who use the equipment do not lend themselves to the discipline found in industrial plants which operate all year around with the same operators. The temptation to take emergency measures to keep production up frequently leads to dangerous practices."

Nineteen Pea Packers On Safety Honor Roll

Nineteen pea packing plants are on the Wisconsin Canners Association's Pea Pack Safety Honor Roll with no disabling injuries during June or July. They are listed according to man-hours of exposure:

The Larsen Co., Green Bay; California Packing Corp., Markesan; Cobb Canning Co., Cobb; Stokely-Van Camp, Inc., in Astico, Milltown, Frederic, Horicon, and Berlin; Mammoth Spring Canning Co., Sussex; Reeseville Canning Co., Reeseville; Pardeeville Canning Co., Pardeeville; Calumet-Dutch Packing Co., Cedar Grove; Fall River Canning Co., Fall River; Athens Canning Co., Athens; Oostburg Canning Co., Oostburg; H & I Foods, Inc., Hustisford; Loyal Canning Co., Loyal; Sauk City Canning Co., Sauk City; St. Marys Packing Co., North Freedom.



GUESTS AT THE FIRST anniversary Open House held on July 14 by the Robert Gair Company's Angelus Corrugated Box Division in Los Angeles, watch fabricating operations during a tour of the 100,000-square-foot plant. Gair acquired the Angelus Paperbox Company in early 1954 and established two separate Gair divisions to take over its operations.

MEETING TO STUDY the mechanics and techniques of the institutional food industry, more than 200 wholesalers representing seven southeastern states attended the Institutional Sales School on June 4 in Richmond, Va. The School was sponsored jointly by Taylor and Sledd, Inc., and Can Manufacturers Institute. Among the "faculty" were seated from left: Martin Horn, owner of Pals Cabin & Mayfair Farms Restaurants; Katherine Smith, Home Economics director, NCA; Chas. Rovetta, dean of the School of Business, U. of Fla.; H. H. Jaeger, marketing director, Can Manufacturers Institute; and standing from left: Russell Kraemer, general manager, Institutional Products Div., General Foods; Robt. Rabbino, production director, Brass Rail Restaurants; Leo Nejelski, president, Nejelski & Co., management counsels; and Chas. Loeffel, business manager, Ahrens Publishing Co.

Libby Ships Frozen Food Unrefrigerated

Test of a new and revolutionary method of shipping frozen food without refrigeration was initiated August 9 by Libby, McNeill & Libby, when a cargo of frozen foods was started on its way to Caracas, Venezuela.

The food was brought to minus 150 degrees and was to be maintained at below zero temperatures during the shipment without truck, railroad car, or steamship refrigeration.

W. C. Mitchell, vice president in charge of frozen foods at Libby, said the South American shipment is the first of several pilot shipments in a final phase of tests of the new method. Domestic shipments using unrefrigerated trucks and railroad cars will later be made between U. S. cities testing various types of frozen food products.

The shipment to Venezuela will be made as deck cargo on a Grace Line ship proceeding through the tropics, thus providing a rigorous test of the process, known as "super chill."

The container being used in the test is 7'1" square and 7'6" high. There are six inches of insulation between an aluminum liner and aluminum outer jacket. Containers such as this can be loaded on trucks, transferred to flat cars or box cars, carried aboard ship either in hold or on deck without affecting the refrigeration.

"Keeping the food well below zero at all times will result in a better quality product," Mr. Mitchell said. "The development promises to facilitate domestic shipments and open up new overseas markets."

1956 Convention Schedule

Schedule of events for the 1956 Convention sponsored by National Canners Association, National Food Brokers Association, and Canning Machinery & Supplies Association is as follows:

Monday, Jan. 16—NFBA annual meeting.

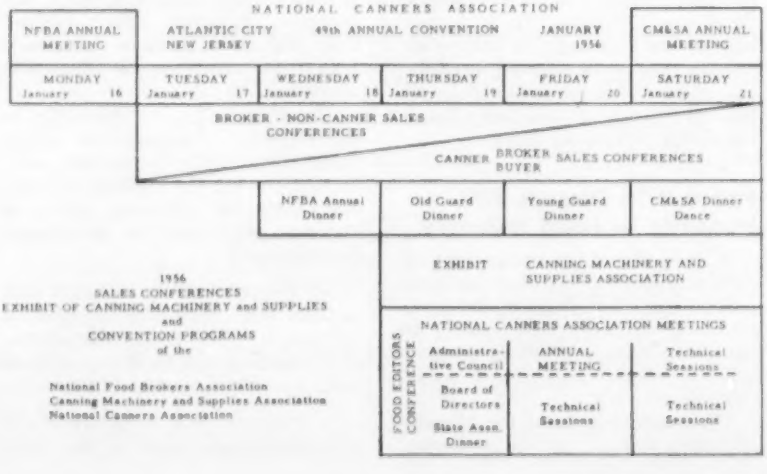
Tuesday, Jan. 17 through Saturday, Jan. 21—Broker and non-canner sales conferences; broker-canner-buyer sales conferences.

Wednesday, Jan. 18—NFBA annual dinner.

Thursday, Jan. 19—CM & SA exhibit; NCA food editors conference (C & TR program); NCA Administrative Council; NCA Board of Directors; Old Guard dinner; Dinner of State Secretaries; NCA special technical sessions.

Friday, Jan. 20—CM & SA exhibit; NCA annual business meeting; NCA special sessions; Young Guard dinner.

Saturday, Jan. 21—CM & SA annual meeting; CM & SA exhibit; NCA special sessions; CM & SA dinner dance.



PRESIDENT G. A. MENGLE of Brockway Glass Co. receives "Oscar" award from R. E. Quaid, vice president of Smith, Taylor & Jenkins, Inc. for a recent sales promotion campaign. From left: Mr. Quaid; F. J. Hutchison, Brockway's advertising and sales promotion manager; Mr. Mengle; and J. A. Giddings, vice president and general sales manager of Brockway. Award was made by the First Advertising Agency Group.

Students Run Factories In Unique Project

A growing number of high school students will gain on-the-spot experience in running a factory during the coming year.

The students will be participants in a project known as the Students-in-Industry program, developed by the American Can Company and tested on a "pilot" basis during the last school year in St. Louis, Portland, Me. and Hoopeston, Ill.

Basically, the program consists of using Canco plants and sales offices as "laboratories" for case studies of industry in operation and then giving the students a chance to actually run the factories in collaboration with the regular supervisors, explained L. W. Graaskamp, company vice president. A major purpose of the program, he added, is to help the student bridge the gap between classroom studies and the realities of an industry working within the community.

Canco is planning to offer its cooperation in expanding the program this fall to high schools in New York City and Indianapolis and later to other selected cities where the firm operates factories.

Last winter's tryouts of the program were reportedly widely acclaimed by school officials. Philip J. Hickey, superintendent of instruction for St. Louis, said: "The Students-in-Industry program looks to us like the answer to meaningful education of high school students in the whys and wherefores of the free enterprise system."

A typical Students-in-Industry works this way:

The manager of the local Canco plant works with a high school in his community to develop a project that meets the school's specific requirements and to set up a class—usually of seniors—to participate in the program. (The student groups have ranged in size from 30 to just under 100. Both boys and girls participate.)

Then for a period ranging from three to six weeks, management personnel from the Canco factory meet daily with the class, discussing with the students various aspects of the company's national and local operations, as well as the economics and operation of the container and container-using industries in general. Using Canco as a case study, a broad background of American business functioning is given. Field trips are made to the can factory and to industrial plants where Canco-made containers are used.

The school room phase of the course concludes with the students being assigned to managerial positions in the local plant for a full day, where they work side by side with regular company managers and supervisors. On this occasion, known as S-Day, the posts filled by the students range from plant and district sales managers to assistant foremen, plant nurse and, at times, key secretarial jobs.

The Students sit in on all meetings, handle daily correspondence, prepare and sign daily reports, take telephone calls, order raw materials, call on customers, etc. Every effort is made to give the students a full, active day in which they make management decisions and perform normal managerial duties.

Coca-Cola Packaged In Cans for Export

An order of 100,000 cartons of Coke in cans for military personnel in the Far East has been completed by the Army and Air Force Exchange Service.

Using 12-ounce containers manufactured by American Can Co., The Coca-Cola Bottling Co. of California canned the product for export only in cartons of 24 cans at its plant in Hayward, Cal., for The Coca-Cola Export Corp., which supplied it to the Far Eastern theater.

The 1955 Spring Pack Of Frozen Spinach

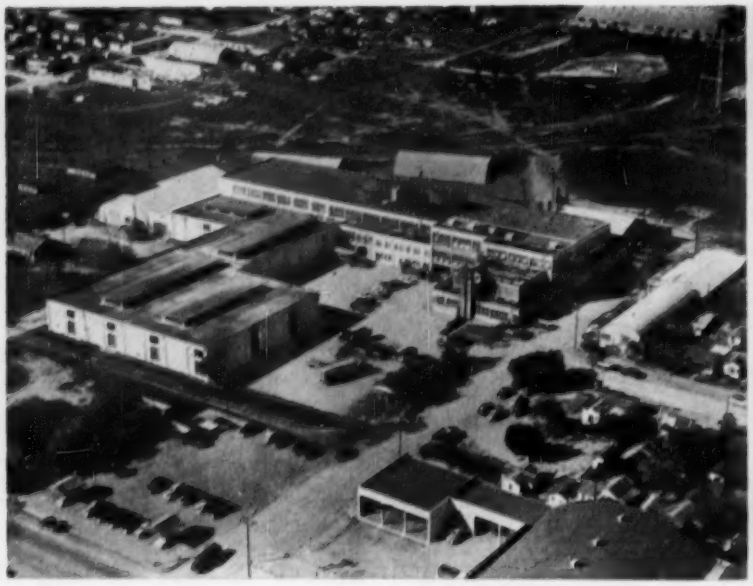
The spring pack of frozen spinach this year reached a record total of 66,889,957 pounds, according to a survey conducted by the National Association of Frozen Food Packers. This production total was almost 55% greater than the short pack of 43,198,-061 pounds in the spring of 1954, but was just barely larger than the 1953 spring pack.

The pattern of regional production continued about the same as in past years. All major producing regions participated in the pack expansion.

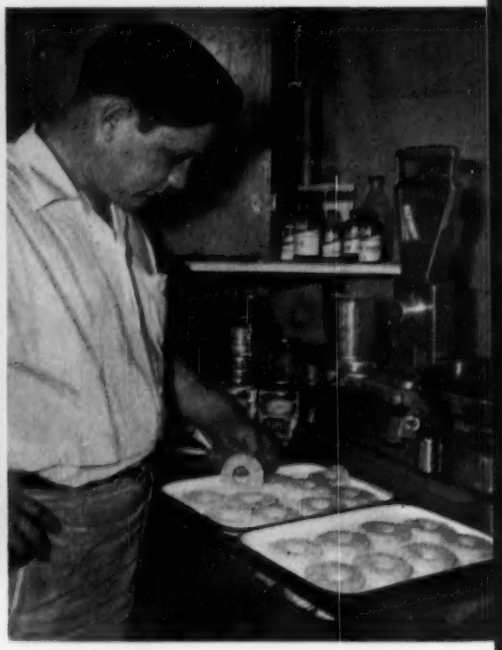
Retail sizes again were dominant this spring. The retail pack, mostly 12-ounce size, amounted to nearly 47 million pounds and represented about 70% of total production. Most of the remainder of the pack went into 3-pound containers, but there was a modest volume in 2½ size.

Prune Juice Purchases Show 31 Percent Gain

A new record of monthly prune juice purchases at retail stores was established for May 1955, according to the report recently issued by the Agricultural Marketing Service of the U. S. Department of Agriculture. 587,-000 cases were purchased by householders compared with 447,000 cases during May 1954, a gain of 31 percent. This increase of 140,000 cases is the largest volume as well as percentage gain made over the same month in the previous year since 1949, when the USDA initiated the Consumer Survey of Fruits and Juices.



VIEW OF THE HARLINGEN Canning Co., in Harlingen, Texas. More than 60 different food products are packed here.



BILL PLIER, quality control supervisor, makes one of his frequent quality checks on fancy pineapple slices.

THE HARLINGEN CANNING CO.

Largest Pineapple Canner in U. S.

Engineering Versatility, Making Possible the Production of More Than 60 Different Products in One Plant, Has Built the Harlingen Canning Co., Harlingen, Texas, to a Position of Industry Prominence in Less Than Twenty Years

ENGINEERING VERSATILITY, making possible the production of more than 60 different products in one plant, has built the Harlingen Canning Co. to a position of industry prominence in less than 20 years. In addition to packing a wide variety of dry-pack products and seasonal vegetables, Harlingen is the largest pineapple canner in the country, accounting for about 80 percent of the U. S. pack.

The company's location at Harlingen, Texas, in the Lower Rio Grande Valley, is ideal from the standpoint of crop production. Annual frost-free days average 340. Although in past years the water supply for irrigation was variable, the recently completed Falcon Dam on the Rio Grande River has virtually assured adequate supplies. The semi-tropical climate makes possible the production of two vegetable crops annually from the same land.

Harlingen Canning Co. was organized in 1936 by Howard E. Butt to pack citrus juices. Mr. Butt has owned the company continuously. Tomatoes and sauer kraut were next added to the line, and each succeeding year has seen the company's list of products grow. Annual production now totals well over a million cases in the following nine different classifications: (1) juices; (2) dry pack; (3) vegetables; (4) beverages; (5) coffee; (6) preserves; (7) potato chips and corn chips; (8) fruits; and (9) salad dressing.

Physical Facilities Grown

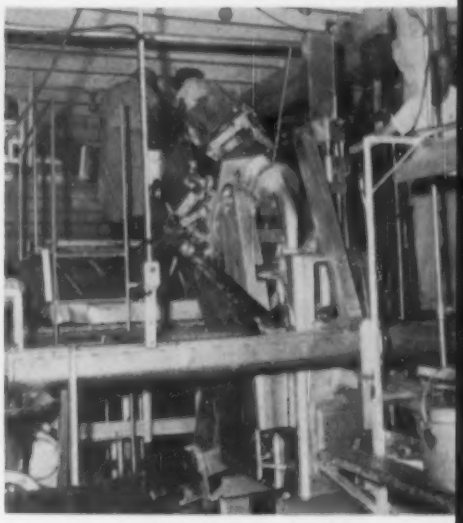
In physical facilities, the company has grown from a humble beginning in a sheet-iron machine shed to a fine, multi-story modern plant in excess of 165,000 square feet and with an attached warehouse that holds 500,000 cases of canned foods. Through superb engineering design and construction, the many canning and processing lines have been arranged so that change-overs can be made quickly and with little lost motion. Four different products can be packed simultaneously.

Good physical growth requires excellent planning, and the Harlingen Company has been fortunate in this respect. Management is flexible, responsibility is definite and clear-cut, and is delegated only to men who will produce results. Young (43), affable Van C. Snell, who joined the company when it was organized, has been manager for the past 10 years.

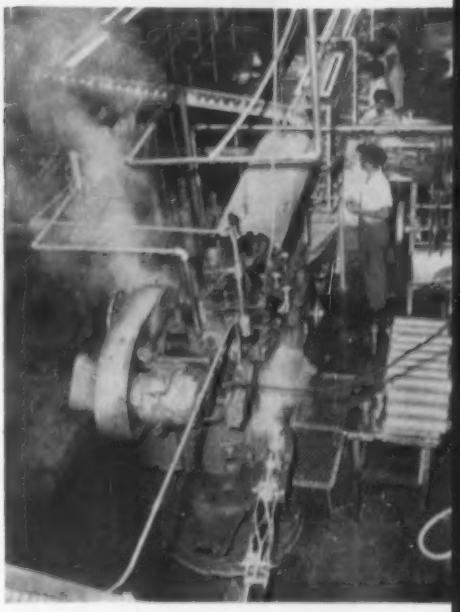
"Our basic problem was two-fold," says Mr. Snell. "First, we had to plan and develop the plant to conform with the weather here. Second, we wanted to build a year-around operation."

The first objective was accomplished by locating where there is an abundance of land that can be irrigated and where labor is relative-

UNLOADING and chopping tops and bottoms off pineapple prior to entering plant.



F.M.C. "MULTI PURPOSE Ginaca Machine" peels, cores, and removes edible flesh from pineapple.



SEALED CANS being elevated for conveyance to processing center.

ly cheap and plentiful. The company owns outright about 1,000 acres of land and contracts crops on several thousand more acres.

The second objective was accomplished by going into an extensive dry-pack operation. By arranging a reserve stock of raw materials, dry-pack foods are packed in the slack periods between processing fruits and vegetables.

About half of Harlingen's products are sold under company labels; the remainder under buyers' labels. The sales staff consists of Sales Manager James A. Burch and a network of food brokers which operates in the entire U. S. and Canada. "We've found that good brokers are good salesmen, so we depend on them to move our products instead of employing a large company sales force," says Mr. Burch.

Big In Pineapple

Harlingen's versatile and efficient plant organization is perhaps best demonstrated by its pineapple-processing operation. The pineapple season extends from May 15 to about August 1, and during that period 7,000 to 10,000 tons of pineapple are canned. Average plant capacity is 275 tons per 20-hour day.

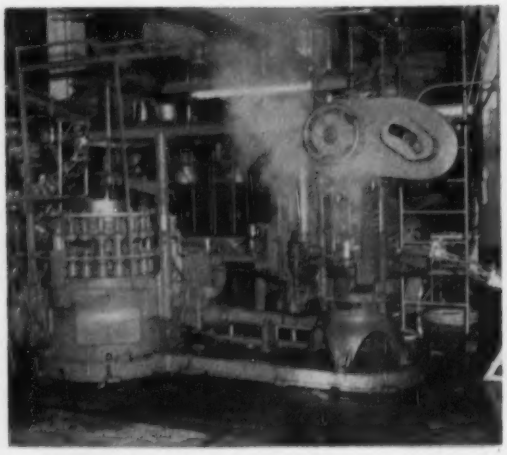
The raw product, primarily the Cayenne variety, is grown under contract in the Tampico and Vera Cruz areas of Mexico, east of Mexico City. Growing crops are inspected frequently by the field staff and quality control staff, under supervision of Field Supervisor Norman A. Wilson and William P. Plier, director of research and quality control, respectively.

When Harlingen started packing pineapple several years ago, originally at the request of fresh-fruit handlers who occasionally had surpluses, all fruit was peeled and cored by hand, and the total production was packed as "crushed." Since then, however, productivity per unit has increased 800 percent, and the company's pineapple products now include slices, broken slices, chunks, crushed, and juice.

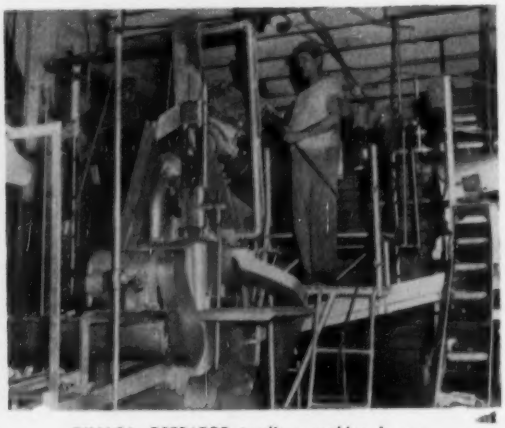
Fruit for processing arrives at the plant by rail, boat, or truck. It is unloaded and the top and bottom leaves are cut off and ground for cattle feed. The trimmed pineapple is conveyed through a spray washer before being placed on a lug chain that feeds the fruit into a FMC Ginaca (a multi-purpose machine which removes the edible portion from the inedible). In the first operation, the cylinder for chunks or slices is formed and the peel removed. Fruit tissue adhering to the peel is passed to an eradicator which can be either a one-stage or a two-stage operation. In a two-stage operation, a double set of knives divides the fruit tissue, the

Cover Picture

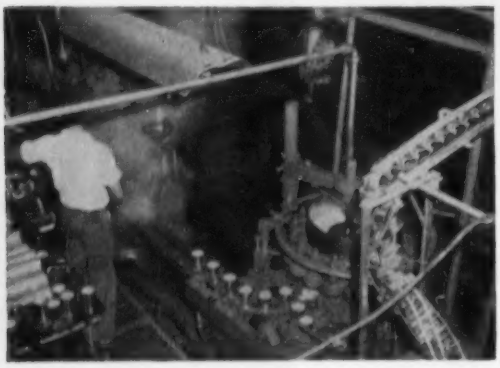
Harlingen Canning Co.'s management and production staff meet. Seated, from left: George C. Roberts, plant superintendent; Van C. Snell, general manager; and James A. Burch, sales manager. Standing, from left: B. J. Kaechele, plant engineer; Albert F. Taylor Jr., office manager; W. P. Plier, director of research and quality control; and Norman A. Wilson, field superintendent. Not shown is E. C. Bentley, warehouse superintendent.



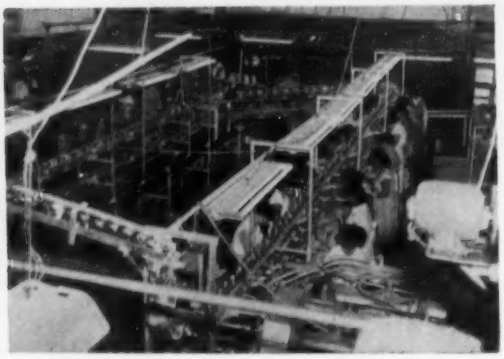
SIDE VIEW of F.M.C. pre-vacuumizer syruper and closing machine. Cover syrup preparation tanks in background.



GINACA OPERATOR tending machine in operation.



TOP VIEW showing packing of whole and broken slices pineapple.



FILLED CANS emerging from F.M.C. pre-vacuumizer syruper.

innermost going to crushed. The edible tissue next to the peel is used for making pineapple juice.

The cylinder with the peel removed is dropped into a turret where the fibrous core from the center of the fruit is removed, and approximately ⅛-inch of tissue is cut from both the top and bottom. These cuts and the core contribute further valuable constituents for pineapple juice.

Upon completing this cycle, the cylinder slides down a chute into an inspection belt for further trimming prior to being sliced in an FMC slicer. The slices emerge fan-shaped, are carefully inspected, and then are packed 10 slices to a No. 2 can, four to a No. 1 Flat, and 50 to a No. 10. Broken slices remaining are also packed in No. 2's and No. 10's. All filled cans are conveyed to a FMC pre-vacuumizer syruper, the first cycle of which removes entrapped air from the tissues. During the second cycle the cover syrup is added.

The flesh in the first stage of the eradicator operation discussed above is dropped into an inspection belt where inspectors remove fragments of peel, fruit eyes, and blemished tissue. The fruit is then pumped to stainless-steel kettles by a Waukesha pump. Sugar is added, the fruit-sugar mixture is agitated and heated to 195° F., and flows by gravity to FMC fillers for filling in either eight-ounce, No. 303, or No. 10 cans.

Flesh from the second eradicator operation, along with cores and top and bottom cuts, are ground in an Enterprise grinder, finished in an FMC finisher, and pumped to holding tanks where it is sweetened, if necessary. The juice then passes through a Chisholm-Ryder pasteurizer and is filled into either 46-ounce, No. 2, or six-ounce cans. The cans are spinner-cooled and taken to the warehouse on a cable track for labeling, casing, and shipping.

Good Quality Control

Because of the multiplicity of products, quality control at the Harlingen plant is an exacting procedure. Basically, it calls for segregation of the raw product before processing, and regrading of the processed product. But what Mr. Plier regards as the main function of the laboratory is preventive quality control.

For example, pineapple cover syrup contains sugar, of course. Not only is this syrup carefully controlled for sweetness and taste, but it is also analyzed frequently by refractometer to make sure it remains in the proper range of 22° Brix. "Sugar content is very important in the pineapple," Mr. Plier says. "Only one percent more than is necessary would waste 17,500 pounds of sugar during our pineapple pack. At the current cost of 8.53 cents a pound, we would lose $1,492 in sugar alone. What better reason do you need for good quality control?"

Quality Control Clinic

WILBUR A. GOULD, PH.D.
Ohio State University
Quality Control EDITOR

USDA Amends

Regulations for inspection of processed fruits and vegetables

RECENTLY THE PROCESSED PRODUCTS Standardization and Inspection Branch of the Fruit and Vegetable Division of the U. S. Department of Agriculture released the amendments to the regulations governing inspection and certification of processed fruits and vegetables and related products. This release contains information of particular interest to fruit and vegetable processors, governing the grading and certification of processed foods, fees, sampling rates, and sanitary requirements for plants operating under continuous inspection.

USDA Inspection (1) "provides a means for determining compliance with standards and specifications; (2) serves as a basis for quality control programs; (3) acts as a guide in determining loan values and for sales transactions, and (4) aids in orderly marketing in many other respects."

The recent release answers many questions, such as the following:

(1) Where is the inspection service offered?

"Inspection service may be furnished wherever any inspector or licensed sampler is available and the facilities and conditions are satisfactory for the conduct of such service."

(2) Who may obtain the inspection service?

"An application for inspection service may be made by any interested party, including, but not limited to, the United States and any instrumentality or agency thereof, any state, county, municipality, or common carrier, and any authorized agent in behalf of the foregoing."

(3) How do you make application?

"An application for inspection service may be made to the office of inspection or to any inspector, at or nearest the place where the service is desired. An up-to-date list of the Inspection Field Offices of the Department may be obtained upon request to the Administrator."

(4) What is the basis of inspection?

"Inspection service shall be performed on the basis of appropriate U. S. Standards for grades of processed products, Federal, Quartermaster Corps, Military or Veterans Administration specifications, written buyer and seller contract specifications or any written specification supplied by an applicant which is approved by the Administrator."

(5) How are the samples drawn by inspectors or licensed samplers?

"An inspector or licensed sampler shall select samples, upon request, from designated lots of processed products which are so placed as to permit thorough and proper sampling in accordance with the regulations in this part. Such person shall, unless otherwise directed by the Administrator, select samples of such products at random, and from various locations in each lot in such manner and number, not inconsistent with the regulations in this part, as to secure representative samples of the lot.

(6) What are the sampling rates for officially drawn samples?

These rates were presented in this column, January 1955 (2). Further details for larger lots and other products may be found in the AMS-65 release (1).

(7) What is the schedule of fees?

"(a) Unless otherwise provided in a written agreement between the applicant and the Administrator, the fees to be charged and collected for any inspection service performed under the regulations in this part at the request of the United States, or any agency or instrumentality thereof, shall be at the rate of $4.50 per hour.

"(b) Unless otherwise provided in the regulations in this part, the fees to be charged and collected for any inspection service performed under the regulations in this part shall be based on the applicable rates specified under the regulations."

The minimum fee for officially drawn samples from lots of 600 cases or less for canned samples, or 10,000 pounds or less for frozen samples, is $9.00. For unofficially drawn samples the minimum fee is $4.50. In addition to the fees the USDA has the following charges "for micro, chemical, and certain other special analyses which may be requested by the applicant or required by the inspector to determine the quality or condition of the processed product:"

(Continued on page 38)

Types of analysis (1)*	For first analysis	For each additional analysis
Mold count	$1.50	$1.50
Worm larvae and insect fragment count	3.00	3.00
Fly egg and maggot count	3.00	3.00
Alcohol insoluble solids	5.00	3.00
Ascorbic acid (vitamin C)	9.00	2.00
Catalase test	3.00	1.50
Fiber (green and wax bean)	6.00	3.00
Moisture (air oven method)	3.00	3.00
Peroxidase test (frozen vegetables)	4.50	3.00
Sulphur dioxide (direct titration)	5.00	3.00

**(1) These are examples of analyses determined by USDA. Many other types of analyses are performed and the appropriate charges are listed in AMS-65 (1).*

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THE TREASURER:
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THE PRESIDENT:
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THE SALES DIRECTOR:
"When you're selling *quality*, you need Vapor-Vacuum!"

Why TOP PRODUCTION MEN

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When a top-notch production chief says, *"Vapor-Vacuum is the production man's dream!"* he's probably expressing his natural impatience with talk about "substitutes" for this long-time favorite of his.

Production men fight for Vapor-Vacuum because it's one of their best allies in the fight to produce more and better—*at a profit.*

The nutshell description of Vapor-Vacuum as "the production man's dream" is an actual statement by the plant chief of one of the most famous food packers. What's more, it represents a widespread belief among top production men.

The men who carry the load on the manufacturing end of food packaging plants have very strong opinions on the question of sealing methods. They don't just *prefer* Vapor-Vacuum, they *fight for it*. Their reasons are clear and substantial.

Any day . . . or month . . . or year

In the life of a food production executive, there are many times when he has reason to be glad his packaging lines are Vapor-Vacuum equipped. At any time of day—or at the end of the day, the month, the season, he can see plenty of concrete reasons to be thankful for this unparalleled production aid.

There is, first of all, *the daily benefit* of smooth, uninterrupted production. No other sealing method has ever matched Vapor-Vacuum for trouble-free runs.

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At the month's end, there is the satisfaction of the production cost reports, which prove over and over that speed and smoothness at the sealing stage are tremendous money-savers.

And at the end of each season, when the figures are all in, Vapor-Vacuum invariably proves that the words "production man's dream" are completely accurate.

Extra dividend for Production Men: Vapor-Vacuum's never-failing interest in the efficient performance of every Vapor-Vacuum-equipped line. What Vapor-Vacuum sells is EFFICIENT PRODUCTION—made operative through a Field Service organization which never lets up in its drive to keep every Vapor-Vacuum-equipped line at top efficiency.

• • •

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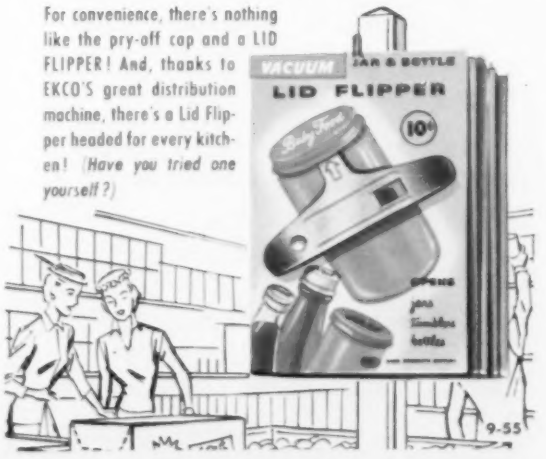
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Quality of Some Varieties of Frozen Peaches and Nectarines

By
Kenneth D. Demaree, Charles W. Culpepper, and Leon Havis, United States Department of Agriculture, Beltsville, Maryland

Variety is generally recognized as important in determining the suitability of a crop for freezing. Caldwell *et al.* (1) compared 56 varieties of peaches and found that J. H. Hale, Reeves, Up-to-Date, and Eclipse varieties were more satisfactory when frozen than other varieties tested. In an excellent bulletin, Van Blaricom and Musser (2) recently reviewed much of the literature on peach processing and presented results of freezing and canning a large number of peach varieties in South Carolina. From 1949 to 1951, as an adjunct to the peach breeding and varietal studies of the Section of Fruit and Nut Crops at the Plant Industry Station, Beltsville, Md., 57 varieties of peaches and three of nectarines were tested for suitability for freezing. Results of these studies are reported here.

Materials and Methods

The fruits were harvested when firm ripe (two to three days past the shipping stage) and held at 70° F. until they were soft ripe. The soluble solids of each variety were determined with an Abbe refractometer. Six fruits were selected at random from each sample, and the juice from 1/8 of each peach was squeezed into a suitable container and well mixed, and refractometer readings were made. The readings were corrected for temperature and the percentage of the soluble solids was calculated from the readings.

The peaches were peeled by immersion in boiling water for 45 seconds, cooled in running water, halved, stoned, and mechanically sliced into 3/8-inch slices. One part of sugar to four parts of fruit and one part of ascorbic acid to 1,000 parts of fruit were added. The peaches were then packed in one- and two-pound cardboard cartons with an inner liner of cellophane or laminated paper. The liners were sealed with a hot sealing iron so that they were air-tight. The packages were frozen and held at 0° F. for 5½ months or until removed for examination and grading.

Many trees in the variety orchard were discarded at the end of the 1949 growing season because of disease susceptibility, poor tree growth, poor producing ability, or lack of space; so no fruit from these varieties was available in the following years. Elberta was chosen as the standard, because it is the variety most widely grown and most frequently frozen.

The frozen product of each of the varieties listed in the table was graded for each of four characters: color, texture, flavor, and general adaptability to freezing. General adaptability to freezing included not only color, texture, and flavor, but also overall appearance and resistance to browning due to oxidation upon thawing. The judging panel consisted of experienced judges, who evaluated the fruit both frozen and after thawing. A numerical scale of 1 to 10 in which 10 denoted best and 1 poorest was employed. The judges' scores were averaged, and because there were no sharp lines of demarcation, arbitrary groupings were made as follows: 7.5 to 10 excellent, 6.8 to 7.4 good, 5.1 to 6.7 fair, and 1.0 to 5.0 poor.

Results

The varieties are listed in Table 1 in decreasing order of general adaptability for freezing. Elberta, the standard, had a rating of 6.9 for general adaptability, 6.3 for color, 6.9 for texture, and 6.0 for flavor. There were 20 varieties that rated higher than Elberta, 7 of equal rank, and 29 varieties that rated lower. Twelve varieties received a general adaptability rating of 7.5 or higher, with Stevenson Cling having a rank of 8.0.

The 12 varieties rating excellent (7.5-10), in order of their adaptability for freezing were Stevenson Cling, July Elberta, Raritan Rose, Kalhaven, Fredberta, Ranger (grown in Va.), Vedette, Prairie Schooner, Herbhale, Rio-Oso-Gem, Short, and Late Rose. These varieties, except for Raritan Rose and Late Rose, rated high in all characters: both of these white-fleshed varieties were graded down because of color. Prairie Schooner had the highest average of those tested for three years.

Twenty-one varieties rated good (6.8 to 7.4). The order of their adaptability for freezing can be noted in Table 1. A few varieties in this group were excellent in flavor but were down-graded because of color or texture. Sunday Elberta, one of this group, was also packed without sugar or ascorbic acid to determine the effects of such packing methods. Under these conditions, it was rated poor (3.1 for general adaptability, 2.9 for color, 4.7 for texture, and 2.0 for flavor).

Twenty-two varieties rated fair (5.1 to 6.7); most of these varieties had poor color (dusky red or streaked with red), were low in acidity or astringency, or browned rather readily after peeling.

All the white-fleshed varieties (Raritan Rose, Late Rose, Wild Rose, White Hale, Summer Rose, and Cherryred) were graded low on color, even though other characteristics such as texture or flavor were high, indicating that the yellow-fleshed varieties are preferable for freezing.

Two varieties rated poor (1.0 to 5.0). These varieties were Cherryred and Ambergem, the tough-fleshed or non-melting (canning cling) type. Cherryred was white-fleshed, but the flesh was stained with red to the stone cavity so that it appeared blood red. This unattractive appearance was probably enough to place it in the poor group regardless of its other characteristics.

The three varieties of nectarines used in this study were Gower, Peacharina, and Rubired. Rubired, a white variety having red streaks through the flesh, received a rating of 6.8 and 7.0 for flavor and general adaptability, respectively. Gower, also a white variety, was poor in all characteristics. Peacharina, a pale, lemon-yellow variety received a rating of 6.0 for flavor and 6.7 for general adaptability.

While refractometer readings are a measure of soluble solids, including

(Continued on page 39)

Table 1. Peaches and nectarines tested for one, two, or three years at Beltsville, Maryland, arranged in order of their general adaptability to freezing.

Variety	Type (1)	Year of test	Soluble Solids (per cent)	Color Rating	Texture Rating	Flavor Rating	Rating for General Adaptability for Freezing
Stevenson Cling	YCM	1949	14.1	7.1	7.9	7.2	8.0
July Elberta	YFM	1949	13.3	6.7	7.6	7.2	7.8
Raritan Rose	WFM	1950	12.0	4.9	7.2	6.5	7.8
Kalhaven	YFM	1949	13.4	7.8	7.8	6.4	7.7
Fredberta	YFM	1949	12.6	6.3	7.2	6.4	7.7
Ranger (grown in Va.)	YFM	1951	11.9	8.4	6.2	6.4	7.7
Vedette	YSM	1949,1951	12.6	6.8	7.2	7.7	7.6
Prairie Schooner	YFM	1949,1950, 1951	13.8	6.5	7.4	6.9	7.6
Herbhale	YFM	1949	12.7	6.8	7.5	6.8	7.6
Rio-Oso-Gem	YFM	1949	12.4	8.4	6.0	6.4	7.6
Short	YFM	1949	13.3	8.1	7.8	6.5	7.5
Late Rose	WFM	1951	17.7	6.2	6.0	6.2	7.5
Salberta	YFM	1949	14.2	7.4	7.7	7.1	7.4
Romance	YFM	1950	12.7	8.4	7.3	5.6	7.3
Southland	YFM	1949,1951	12.3	7.2	6.4	6.9	7.3
Wild Rose	WFM	1950	13.9	5.6	7.7	7.0	7.2
Ozark	YFM	1949	14.1	6.8	7.4	7.5	7.1
Triogem	YFM	1949,1950, 1951	11.9	6.6	6.6	7.0	7.1
Prairie Rambler	YFM	1949	14.9	7.1	7.3	6.9	7.0
Sandhill # 1	YFM	1949,1950	13.1	6.8	7.4	6.8	7.0
Rubired (nectarine)	WFM	1949	17.6	5.0	6.0	6.7	7.0
Elberta	YFM	1949,1950, 1951	12.6	6.3	6.9	6.0	6.9
Early Elberta	YFM	1949,1950,	13.1	6.9	7.4	7.4	6.9
Fay Elberta	YFM	1949	12.8	6.8	7.0	6.2	6.9
Redcrest	YFM	1949	15.3	4.2	6.5	6.5	6.9
Sunday Elberta	YFM	1949	12.2	6.8	7.4	6.5	6.9
Sunhigh	YFM	1949,1951	12.5	6.7	5.6	7.7	6.9
Valiant	YFM	1949	15.6	5.7	6.0	6.2	6.9
Veteran	YFM	1949	13.2	7.1	7.4	6.7	6.9
Dixigem	YFM	1949,1950, 1951	12.6	6.5	6.3	7.0	6.8
Gage Elberta	YFM	1949	12.6	6.6	7.0	7.6	6.8
Goodcheer	YFM	1949	16.3	7.1	6.9	6.6	6.8
Halehaven	YFM	1949,1950, 1951	13.2	6.5	6.5	6.9	6.8
Redhaven	YFM	1949,1950, 1951	11.9	7.1	6.8	6.6	6.8
Sullivan Elberta	YFM	1949	13.5	5.5	6.5	6.0	6.7
Peacharina (nectarine)	YSM	1949	11.9	6.2	6.7	6.4	6.6
White Hale	WFM	1951	----	6.8	5.8	5.8	6.5
Golden Beauty	YSM	1949	10.8	5.0	5.5	5.8	6.4
Ranger (grown in Del.)	YFM	1951	11.9	5.8	6.0	6.4	6.3
Loring	YFM	1950	11.5	5.7	7.0	7.0	6.3
Prairie Daybreak	YFM	1949	9.0	7.3	6.0	6.5	6.3
Autumn	YFM	1949	15.0	6.6	6.7	6.7	6.2
Fertile Hale	YFM	1949,1951	----	7.1	6.5	6.5	6.2
J. H. Hale	YFM	1949	15.4	6.6	7.1	6.1	6.2
Newday	YFM	1949	10.7	4.6	6.9	6.6	6.2
Redelberta	YFM	1949	12.4	5.4	6.3	6.0	6.2
Summer Rose	WFM	1949,1950, 1951	12.4	4.9	7.2	7.5	6.2
Goldencast	YFM	1949	16.6	5.2	5.4	4.6	6.0
Friendship	YFM	1949	12.4	7.1	6.8	5.8	5.9
Gemmer's Late Elberta	YFM	1949	13.5	5.4	5.3	5.8	5.9
Afterglow	YFM	1949	13.1	5.7	5.4	5.9	5.7
Ranger (grown in Mi.)	YFM	1949	12.3	5.2	8.1	6.0	5.6
Prairie Dawn	YCM	1949	----	5.4	6.1	6.4	5.5
Prairie Rose	YFM	1949	13.6	2.9	4.4	6.5	5.5
Golden Jubilee	YFM	1949	9.7	5.6	7.4	6.4	5.2
Jerseyland	YFM	1949,1951	11.9	4.5	5.5	6.8	5.2
Lizzie	YFM	1949	11.6	6.4	7.7	6.3	5.2
Prairie Sunrise	YSM	1949	----	5.1	5.6	5.8	5.2
Penryn	YFM	1949	12.6	4.4	7.2	6.2	5.1
Gower (nectarine)	WFM	1949	17.8	3.9	5.5	6.2	4.6
Ambergem	YCF	1949	11.4	6.7	4.0	5.2	4.1
Cherryred	WCM	1949	----	2.6	2.9	4.6	3.2

(1) YCM - yellow, cling, melting (fresh dessert type)
YFM - yellow, free, melting
WFM - white, free, melting
YCF - yellow, cling, non-melting (canning cling type)
YSM - yellow, semi-free, melting
WCM - white, cling, non-melting

FIG. 5.—Incinerator used to burn solid refuse at the Gilroy, Calif. plant of Gentry Div. of Consolidated Foods Corp.

FIG. 6.—Liquid wastes are diverted into ditches from this and similar sluice gates at the Belvidere, Ill. plant of the Green Giant Co.

FIG. 7.—Corn husks and other solids are ensiled for livestock feeding at Green Giant's Belvidere plant.

Part II

Disposal of Cannery Wastes by Irrigation

by H. D. Brown, Professor of Horticulture
Ohio State University

Harold H. Hale, Hirzel Canning Co.

W. D. Sheets, Research Engineer
Ohio State University

AN IMPORTANT FUNCTION of the 1954 research on disposal of cannery wastes by irrigation was to survey existing installations to see if any other type of waste disposal method might be useful in Ohio to canners. This survey made at the expense of the senior author included processing plants in California, Oregon, Washington, Minnesota, Wisconsin, Michigan, Illinois, and Ohio. Special thanks are due the following firms for their helpful cooperation:

The Orange Products Co., Ontario, Calif.
Driscoll Strawberry Associates, Inc., San Martin, Calif.
Gentry Division, Consolidated Foods Corp., Gilroy, Calif.
San Jose Canning Co., San Jose, Calif.
Green Giant Co., Belvidere, Ill.
Holmen Canning Co., Holmen, Wis.
Gerber Products Co., Fremont, Mich.
Campbell Soup Co., Napoleon, Ohio
Buckeye Canning Co., Weston, Ohio

Through the cooperation of these firms it was possible to study the operation of nearly all types of waste disposal by irrigation.

Furrow Irrigation

Furrow irrigation on uncropped soil has been successfully used by the Orange Products Co. of Ontario, Calif., since 1950. The present technique consists of diverting approximately 700,000 gallons of liquid waste daily (containing six tons B.O.D.) through 24-inch wide back furrows (8-12 inches deep) made by a specially built machine, so that the flow is alternately forward and backwards. For each period of from 90-120 days approximately 54 acres out of a total of 240 acres are used. Thus a four-period rotation of furrow waste disposal is employed. It requires about nine acres daily (2.6 inch per acre application). After two days the ground is disked and reconditioned so it can be employed every six days. A total of 39 inches of liquid waste is thus distributed over the 54-acre plot each year. Percolation downward through the more than 30 ft. of unconsolidated fine sand is approximately eight feet per day. It is estimated that of the total waste water applied, 25 percent is evaporated, 30 percent is held by the soil, and 45 percent percolates downward.

Experience since 1950 indicates that odors, insect infestations, and other undesirable health hazards can be completely eliminated in the field if moist accumulations of solids are completely avoided. Periodic flushing of header lines with well water was found necessary to avoid the accumulation of waste and odors in terminal pipe line headers.

Crop yields on the three cropped areas out of the four areas were improved. Direct applications of the waste to cultivated crops was found to be impracticable because of the high acidity of the citrus wastes. However, after 20 years' application of 800 tons of suspended solids per year (old 20-acre site) the surface soil within the treated area had a pH of 6.2 to 6.3 and that of adjacent untreated areas was 6.4 to 6.5. The organic content of the treated land was .25 percent compared to 0.03 percent for surrounding areas.

Underground Waters

In California an important problem is that of recharging the underground water supply as the water table is being lowered each year by extensive irrigation from deep wells. Even though the average daily application of water was 700,000 gallons to the 54-acre plot, there was no measurable effect on the ground water level.

The data collected indicate that all the organic materials were stabilized prior to reaching ground water. However, there was a significant though small increase in the alkalinity and nitrates in the water of test wells at and below the spreading sites.

Cost

The total cost for the 240-acre disposal site was $251,600 consisting of $131,000 for land, $5,000 for buildings, $2,700 for pumps and motors, $107,000 for constructing the 12-inch outfall sewer, $2,600 for additional sewers on the site, and $3,300 for machinery.

It requires a superintendent and three full-time workmen to operate the farm. Total operational costs for 1953 were $50,958 divided as follows: $19,151 for labor and supplies for farming operations; $31,807 for labor and supplies for the spreading operations and for equipment depreciation. The gross crop and rental income was $27,914, leaving a net cost of disposal operation of $23,044.

(Please turn the page)

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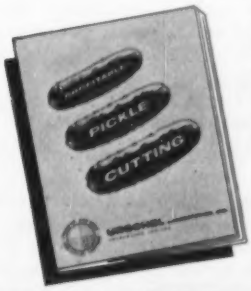

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FIG. 8.—View of spray irrigation in action at Gerber Products Co., Fremont, Mich.

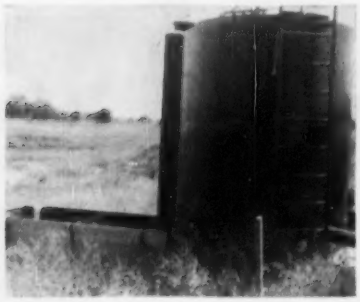

FIG. 9.—Liquid wastes are collected in this tank at the Gerber plant. Electric points activate motors when the liquid reaches certain levels.

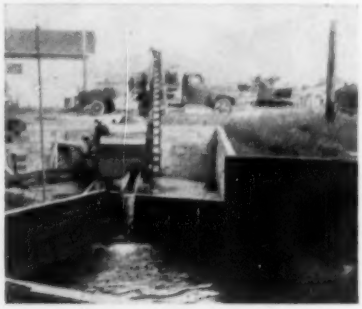

FIG. 10.—View of the equipment used to separate solid from liquid wastes at the Holmen Canning Co., Holmen, Wis.

Flood Irrigation

Several California processors dispose of their waste waters by flood irrigation. Driscoll Strawberry Associates, Inc. at San Martin, disposes of most of the liquid wastes, estimated at 400 to 500 gallons per minute, by conveying it across a dry river to a small area (six acres) about 20 feet above the river and adjacent to it. None of the liquid percolates laterally to the river less than 200 feet away and the waste which inadvertently spills into the dry river bed disappears as quickly as that applied to the area above the river (See Figure 4).

At the Gilroy plant of Gentry Division of Consolidated Foods Corp. the 500 G.P.M. liquid wastes flow into a drain ditch and are absorbed in a length of about one mile. However, during wet, cold winters this waste which had a B.O.D. of 500 to 600 gives off offensive odors. The firm is building an incinerator at a total cost of $18,000 to take care of the solids which are separated on a 20-mesh shaker screen (See Figure 5).

Ditch Irrigation

The Green Giant Co. is installing spray irrigation for waste disposal at most of its plants. However, at the Belvidere, Ill., plant the liquid wastes are disposed of on a 35-acre plot by directing the flow through ditches 2½ feet deep. The ditches made seven years ago with a 36-inch two-way plow are still in good condition and the ground absorbs the liquid as rapidly now as it did then. A luxuriant growth of weeds no doubt helps materially in absorbing moisture and transpiring it into the atmosphere. James Leonard, who spends full time during the canning season in diverting the flow of sluice boxes to the ditches, states that no odors arise as long as the liquid is in motion but that odors arise within 24 hours if it stands still. He believes in allowing ditches to become thoroughly dry after each use as this increases their capacity to absorb liquids (See Figure 6).

In this plant the solid wastes are utilized for silage (See Figure 7). Wherever the solid wastes have a high feeding value this or a similar plan should be followed.

Additional Sprinkler Irrigation Data

The use of sprinkler systems of irrigation for liquid waste disposal has been adequately described by Sanborn and the senior author has visited several of the plants described by him. Since this publication many plants have adopted this system. One of the most interesting is that installed by the Gerber Products Co. at the Fremont, Michigan, plant.

The liquid waste is carried through 17,000 feet of 10-inch transite pipe buried 40 inches underground to a 140-acre field of Ottawa fine sand. The sand extends to a depth of at least 50 feet with a layer of clay about four inches thick at a depth of 18 feet.

The distribution system at the farm consists of eight-inch galvanized steel mains with openings for four-inch aluminum laterals at 130-foot intervals. Each lateral is equipped with five risers at 120-foot intervals. Buckner No. 692 nozzles delivering 81 gallons per minute over an area 210 feet in diameter at 60 lbs. pressure are employed (See Figure 8). It requires about two hours for a one-inch application and the ground will take approximately 10 inches of water without run-off.

The solid wastes separated by shaker screens at the factory, amounting to 20 tons daily, are hauled away at a cost of 50 cents per ton. The liquid wastes, amounting to approximately 50,000 gallons per day, are pumped to the farm at a total cost for electricity of approximately $15 per day (See Figure 9). The total cost of the system was $85,000. Assuming interest and depreciation of $8,500 and an equal cost for pumping at the farm plus the services of one man at the farm, this would cost $73.30 per day, as follows:

Interest and depreciation	$23.30
Pumping at plant	15.00
Pumping at field	15.00
Labor at field	10.00
Hauling solids away	10.00
	73.30

Assuming a pack of 30,000 cases per day this would amount to $2.44 per 100 cases (No. 2 equivalent).

The waste waters at Fremont contain 200 to 3000 ppm of suspended solids and have a B.O.D. of from 800 to 3,000 ppm. The pH is near neutral most of the time but may go as high as 11 to 11.5 during clean-up periods or when lye is employed for peeling, or as low as 4.3 when fruit is being packed.

It is interesting to note in passing that the system is being used all months of the year although a standby lagoon is available for winter disposal if the need arises.

Experimental plantings of trees have been made. The limited data indicate that willow plantings are best adapted to take large amounts of liquid waste.

Miscellaneous Observations

The Holmen Canning Co. at Holmen, Wis., separate the solid from liquid waste by a rotary screen and an additional screen in a 40,000-gallon surge tank. (See Figures 10, 11, and 12). A 40-h.p. motor is employed to pump the liquid waste through 8000 ft. of eight-inch line to the field which is really a sand dune located near the Mississippi river. The waste applied by spray irrigation soaks in as

(Continued on page 41)

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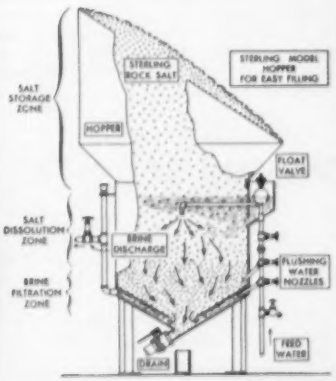

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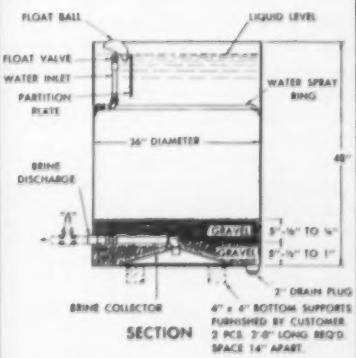
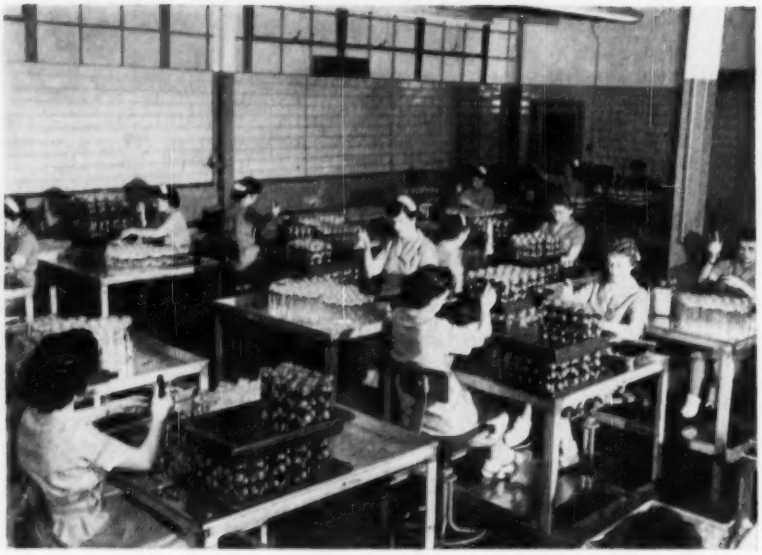


SECTION

THE NEW PLANT and office building of Mario Food Products Co., Detroit, occupies 60,000 sq. ft. of space. Built at a cost of more than $500,000, it is of steel and masonry construction. It replaced a former out-moded, one-story structure that provided few of the facilities found in this carefully designed, contemporary building.



AN IMPORTANT SEGMENT of the Mario operation is the hand-select-packing operation. Shown here are packers hand-placing Mario's combination Party Pack. The same quality control exercised in the machine-packing department is in evidence here.

Mario Food Products Co.

Packs Olives for Greater Mass Consumption

IMPRESSIVE IN FLAVOR and endowed with the dignity of the ages, olives have become one of Nature's gifts of gold to mankind. No other fruit has enjoyed the toasts of epicures for thousands of years. None but the olive possesses a singular individuality or an intriguing, undefinable, mellow taste.

Early history relates that olives were "pickled" in Pompeii, and perhaps this processing was the forerunner of the tremendous olive packing market that exists today. This market is taking on greater importance among olive packers, and to meet consumer demands, expanded production facilities seem the order of the day. Typical of this forward movement in the trade is the effort of Mario Food Products Company, Detroit, Mich. Recently the firm moved into new modern quarters of contemporary design built especially to handle olive and olive oil packing. Old equipment was replaced with modern high speed machines, and improved storage, office and processing facilities provide a dignified manner of operation.

The history of Mario is interesting. From its beginning in 1932, J. Mario Barolo, president and founder of the firm, sought to take the olive out of the luxury price class and, without discounting one iota of quality, place it on the American table as a standard part of a family's daily fare.

Mr. Barolo, born in Marseilles, France, came to Detroit in 1912. His first venture in the trade was packing olive oil, and then olives. In a manner of speaking he had a one-man business packing and personally selling his products. By 1937 he had his first manufacturing building of 4,000 square feet, employing six to eight people. Later he expanded to 18,000 square feet and the business continued to increase. The growth was due to Mr. Barolo's effort to pack only quality olives at lowest possible cost and price for greater mass consumption.

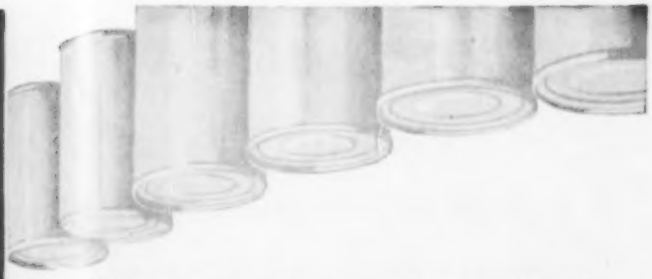
In 1935 Mr. Barolo was joined by his brother, Louis J. Barolo, who became production manager. He acted in this capacity until his retirement in 1950. Present production manager is Ray Borghi.

The state of Michigan was the firm's prime customer, but word of a good product soon spread to neighboring states. The Chicago market was added, and this brought in Indiana. Next came Ohio and expansion to the east saw a portion of the Pennsylvania market become a part of the Mario sales picture.

During all of this expanded sales movement, Mr. Barolo set a business target: To accurately foresee future needs of the consumer market and to set his production goals accordingly. By 1948 the firm showed signs of outgrowing its plant. There was no available adjoining property to acquire for expansion. A railroad siding was lacking and warehouse space had to be rented away from the plant proper. Meanwhile, demands for Ma-

(Continued on page 38)

cut costs with Angelus Seamers



More canners and can manufacturers throughout the world are switching to Angelus Seamers for greater production economies, lower investment costs and minimum maintenance. Angelus Seamers, the products of more than 40 years of experience in developing and manufacturing, are the ultimate in simplified, rugged, efficient design.

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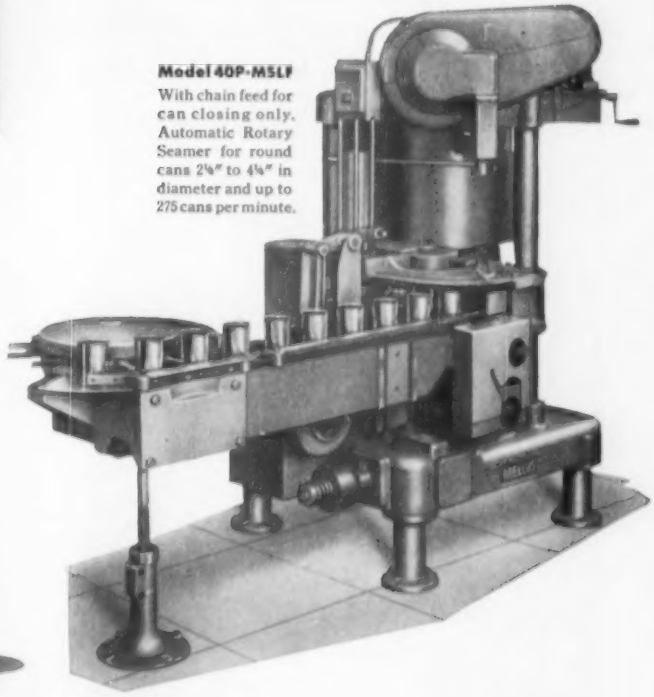
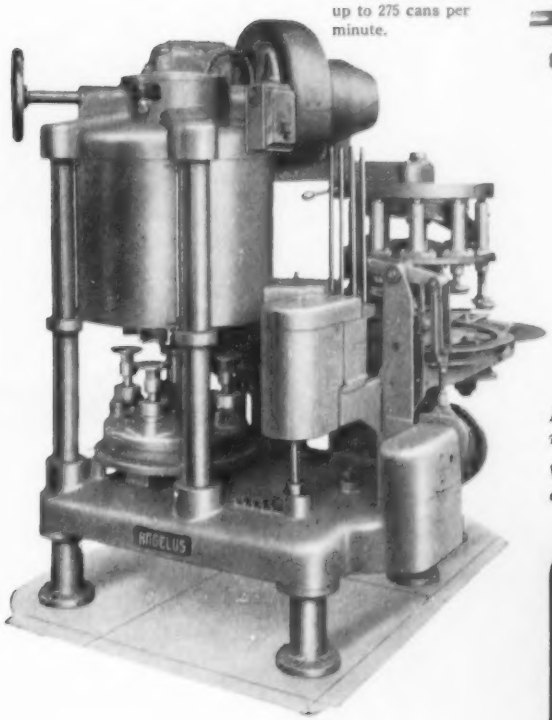


Model 40P-DF
For can closing and can making. Automatic Rotary Seamer with disc feed for round cans 2¼" to 4¼" in diameter and up to 275 cans per minute.



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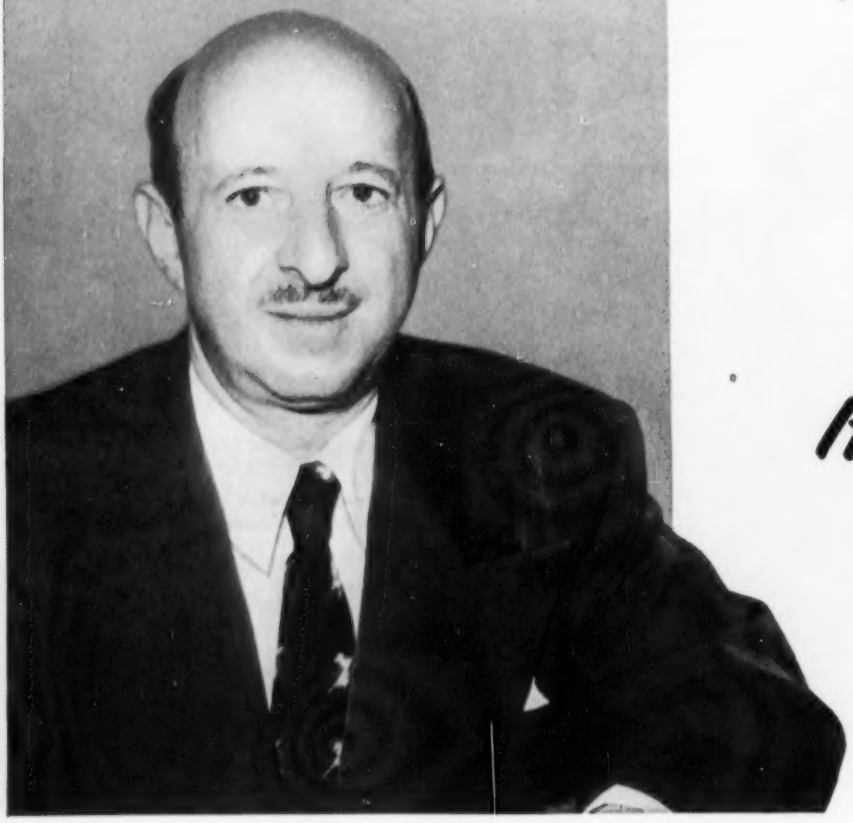
says LEWIS ELLISH, V. P. in charge of Sales and Advertising Mott's Super Markets, Hartford, Connecticut

"We at Mott's Super Markets recognize the sales appeal of glass-packed items, and the way visibility helps our customers make their buying decisions quickly. There's never a doubt about the contents when packed in glass."



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WHAT STOCK CLERKS DID
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Cans—4 cases on display—5th case cut but not ready for display.

Glass Jars—7 cases on display—8th case cut but not ready for display.

LOYAL NEVENSCHWANDER

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Glass Jars—10 cases—not all jars faced.

DuPont Study:

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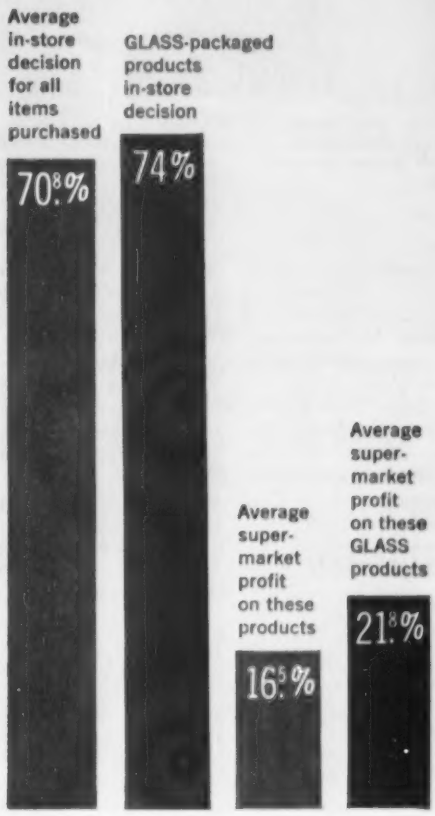

greater sales, and at lower cost

You can regularly make more net profit from your displays if you feature cut cartons of products in glass. Glass yields more impulse sales, and costs less to set up.

Your stock clerks can build cut-carton glass displays in one-third to one-half less time. Prove it to yourself. Try it in your store.

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ALREADY FILLED WITH BRINE, the containers move to the White capping machine which provides a tight vacuum seal to the contents. Proper closures provide protection of contents—keeping them fresh until consumed.

CAPPED AND READY FOR LABELLING, the containers move to the labeler and on to the packer who gives both container and contents a final check and inspection before placing in easy-opening, tear-strip cartons bearing the famous Mario trademark.

(Continued from page 34)

rio's olives were outrunning the available production schedules.

Faced with this expansion necessity, plans were made to build a new and modern plant. A site with four railroad sidings was purchased in 1952 at 6500 E. Warren Ave., relatively close to the old plant. The decision to finally build came in the following spring and on October 2, 1953, ground was broken for a new modern two-story structure. Construction was completed late in 1954 and operations were immediately transferred to the new quarters.

Forty people, of whom approximately 27 are women, are employed in the $500,000 brick and steel 60,000 square foot building. Buik storage facilities and all olive packing operations are maintained on the first floor. The business offices are on the second floor, and in the plant area on this level is the olive oil packing department and brineroom, plus storage facilities for all glass and metal containers used in the business, and carton assembly department.

Approximately 10,000 barrels of olives are imported from Spain each year. Periodically, Mr. Barolo visits the continent to negotiate with the exporters and to keep close check on the quality of the olives intended for shipment to his Detroit plant. This personal contact with the source of supply assures top quality at all times.

Good housekeeping is maintained at the highest sanitation level. The plant has tinted windows throughout, acid-resisting tile floors, and eight-foot high tile walls in all packing rooms. A battery of ultra-violet ray lamps are installed in all packing rooms, olive oil and brine rooms to help eliminate bacteria problems. Packers and production line workers are immaculate; all containers are vacuum cleaned before use; and hospital-clean stainless steel equipment and structural materials predominate in all packing departments.

The Mario firm was among the first in 1945 to package olives in a refrigerator jar, which when empty becomes a handy reusable container for the housewife. All glass containers used bear a handsome foil label in traditional red, white and green colors. Closures are handsomely decorated in the same colors and bear the Mario trademark.

A full line of popular varieties of genuine Spanish olives, including both Manzanilla stuffed and plain and stuffed green varieties are packed both by hand and machine. Some private label packing is done for outside distributors. Three trucks and one tractor and trailer handle outbound shipments in the entire sales area.

Mr. Barolo and Harry Niemec, sales manager, insist that their sales staff be familiar with the needs of the buying market which includes wholesale grocer, super-market chains, and independent grocers. The staff maintains a close relationship with customers and their problems about olives are also Mario's problems.

Quality, price, and service are Mario watch words—a triumvirate responsible for the far reaching success of this Detroit firm.

GOULD

(Continued from page 25)

The USDA also offers plant inspection and continuous factory inspection for grade labeling of the applicant's products. These services are available to applicants if their plants qualify in respect to sanitary and other requirements; they will be discussed in a future article.

References

(1) *Lennartson, Roy W., Regulations Governing Inspection and Certification of Processed Fruits and Vegetables and Related Products. AMS-65, July* 18, 1955.

(2) *Gould, W. A., Proper Sampling Is Prerequisite to Effective Quality Control. FOOD PACKER, January* 1955.

News Briefs

Directors of **General Foods** have approved building plans for a new food research center at Tarrytown, N. Y. Construction will start this fall.

Acquisition of the **Land O' Frost Co.**, Chicago, processor of prepared frozen meat products under the **Land O' Frost** and **Wagon Wheel** labels, has been announced by **Hugo Slotkin**, president of **Hygrade Food Products Corp.**, Detroit.

(Continued from page 29)

sugars, they are not necessarily a measure of quality. Some varieties that had low refractometer readings were of good quality, whereas others with high readings were of poor quality. Varieties high in pectin would give high soluble solids readings, but since pectin is tasteless it would not affect the flavor. Varieties high in tannins would be more astringent in flavor, but tannins would not greatly affect the soluble solids readings. Therefore, there is a rather poor correlation between high soluble solids and general adaptability ratings.

Discussion

To be very satisfactory for freezing, a variety, in addition to producing a good frozen product, should be productive, produce relatively large fruit, and in some areas be especially winter hardy. General adaptability to fresh market use or canning also is desirable. A number of varieties which ranked excellent or very good when frozen lacked other desirable characteristics such as good size, attractiveness, uniform shape of fruit, high yield, disease resistance, and vigor of the tree. Thus many characters other than freezing quality are being considered in breeding and selecting peach varieties.

In the freezing tests, the more important commercial varieties which ranked high for freezing were July Elberta, Rio-Oso-Gem, Kalhaven, Raritan Rose, and Triogem. The Raritan Rose produced a very desirable frozen product and might be useful to many home freezers, but usually white varieties are less popular than yellow ones. Wherever Prairie Schooner, Herbhale, and Southland are grown commercially, they may well be included among those desirable for freezing. Samples of the Ranger variety from Virginia gave an excellent frozen product, but those from Delaware and Beltsville, Md., ranked down in the good group. There is no definite explanation for this variation. If ascorbic acid had not been used to prevent browning, the rating of the varieties would have been considerably different.

In this study no effort was made to include all peach varieties but rather to include those which were relatively new or untested and to include several of the better known varieties for comparison. Although the study was made over a relatively short period, including only one, two, or three years, it should be at least an indication of the value of the

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varieties tested for freezing.

Summary

Results are reported from studies of quality of frozen peaches prepared from 60 varieties in 1949, 1950, and 1951. Most of the fruit was grown in the varietal collection of the Section of Fruit and Nut Crops at the Plant Industry Station, Beltsville, Md. The material for the varietal comparisons was selected at the optimum stage of ripeness for the purpose and prepared for freezing by a standard method (1 part sugar to 4 parts fruit and 1 part ascorbic acid to 1000 parts of fruit in small consumer cardboard packages). The packages were stored at 0° F. for 5½ months prior to examination and grading.

The characters considered in grading were color, texture, flavor, and general adaptability for freezing. Each character was rated separately. The varieties were classified in four groups as excellent, good, fair, and poor on the basis of their general adaptability for freezing.

The 12 varieties rating excellent were Stevenson Cling, July Elberta, Raritan Rose, Kalhaven, Fredberta, Ranger, Vedette, Prairie Schooner, Herbhale, Rio-Oso-Gem, Short, and Late Rose. Some of those rating good were Salberta, Romance, Southland, Wild Rose, Ozark, Triogem, Prairie Rambler, Sandhill No. 1, and Elberta. Some rating fair were Sullivan Elberta, White Hale, Golden Beauty, Loring, Prairie Daybreak, Autumn, J. H. Hale, and Newday. Those rating poor were Ambergem and Cherry-red. Prairie Schooner rated among the best tested in all three years.

Rubired nectarine rated good, Peacharina rated fair, and Gower rated poor.

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2. Van Blaricom, L. O., and A. M. Musser. 1950. Processing peaches in South Carolina. S. C. Agr. Exp. Sta. Bul. 382.

News Briefs

The Kitchens of Sara Lee, Inc., Chicago, has appointed **Ferguson-Langfield Frozen Foods, Inc.**, 955 57th St., Oakland, Cal., as its distributor for the San Francisco-Oakland area.

The International Salt Co., Inc., Scranton, Pa., has signed a long-term lease with the Duluth Dock & Transport Co. for salt storage facilities.

CANNERS ACREAGE

(Continued from page 32)

fast as it is applied. Noticeable increases in weed growth appear wherever the waste is applied. Solid wastes amounting to five loads daily are hauled to the same field. In addition to the 40-h.p. motor used to pump the liquid waste, another 3-h.p. motor is employed to turn the rotary screens. One man devotes his entire time to the waste disposal work.

The Campbell Soup Co. is employing spray irrigation for its tomato and V8 operations at Napoleon, Ohio. The operations are to be expanded to take care of the liquid wastes for the new plant scheduled for completion in 1956. In addition the company has installed a dehydration system to take care of the solid wastes. The dried products are sold. Previously, these tomato solids were placed on land to be plowed under. This at times caused a bad odor and fly nuisance.

From the above it is apparent that there are a number of unanswered questions. At the spring meeting of the Ohio Canners' Association funds were voted for research in 1955:

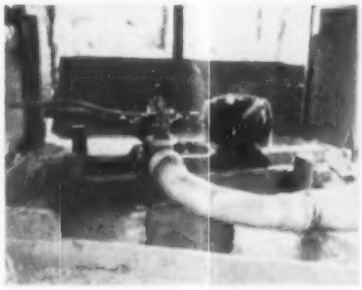

FIG. 11.—Wire-screen box (far corner) is used at the Holmen plant to keep solids from entering the irrigation line.

FIG. 12.—Pump and motor used to force liquid wastes into irrigation lines at the Holmen plant.

1. To determine what becomes of the effluent which will again be temporarily held in the tile lines as an underground lagoon.

2. To see if the B.O.D. of the effluent can be further reduced by redistributing it on the soil. This in effect will be an attempt to utilize soil somewhat the same as trickling filters are employed.

3. To test additional nozzles to see if any are free from clogging even though laniated solids are utilized.

4. To study the effect of various treatments on the removal of B.O.D. by soils.

5. To see if more effective means of separating liquid and solid wastes can be discovered. As operated in 1954 all the liquid wastes passed through the laniator. This placed a useless load on the laniator. Actually the friction produced by the hammers moving in a bowl full of liquid can be sufficient to stall the motor.

From the foregoing it is obvious that much progress has been made in the use of spray irrigation for the disposal of cannery wastes. It is also obvious that a number of problems must be solved before the most intelligent usage of the system can be made.

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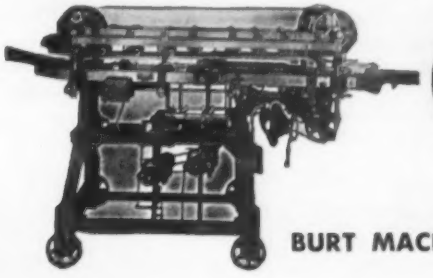

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The Market Place

News of Promotion & Selling

"Premier" Apple Sauce Is Distributed in Glass Pack

Francis H. Leggett & Co., New York, now distributes its "Premier" apple sauce in glass. The new Anchorglass package is a 15-ounce capacity fruit jar, sealed with a pry-off vacuum closure. Attractive "spot" label on the new package is white, printed in blue, red, and green. Labels are by U. S. Printing & Lithograph Co., Cincinnati; jars and caps by Anchor Hocking Glass Corp., Lancaster, O.

Filice & Perrelli Adds Two Glass Packed Products to Line

Filice and Perrelli, Richmond, Calif., one of the largest canners of quality products in the nation, has added two new glass packaged products, Kadota figs and Green Gage plums, to its line of some 130 items of fruits and vegetables. Packed at the firm's Merced, Calif., plant, the figs and plums are available in either 16- or 26-ounce sizes. Glass containers and Vapak closures for the new pack are supplied by Owens-Illinois. Labels are made by Muirson Label Co. F. and P. products are distributed nation-wide through wholesale grocers, super and chain markets.

New Package For Pickles

The Bond Pickle Co., Oconto, Wisc. has changed from paper labeled containers to lithographed decorated cans supplied by American Can Co. The packer's dill and kosher style dills are already being marketed in the 12-ounce cans throughout the midwest, and national distribution is planned within a short time. Bond feels the lithographed label gives the effect of an inside-the-can "look" at the product and has more buy-appeal to consumers.

Durkee Products Shown at International Trade Fairs

Through the invitation of the Office of International Trade Fairs, U. S. Department of Commerce, exhibits of Durkee's fresh egg mayonnaise and Triple Whipped salad dressing in new 12-ounce and 24-ounce freezer jars were shown as part of the U. S. exhibits at international trade fairs held in Frankfurt, Germany and Valencia, Spain this past year.

The U. S. Central Exhibit at the International Spring Fair in Frankfurt, Germany, was "America at Home." This country's central exhibit at the Valencia Fair featured "Operation Fruit Packaging" and Agricultural Aids.

Freezer jars recently adopted by Durkee Famous Foods of Cleveland, Ohio, and Berkeley, California stress these advantages: straight sides; no waste; easy to use. Jars with metal, screw-type closures have multiple reuse features as freezer jars, refrigerator jars, home canning jars, and food storage jars.

Both freezer jars and lithographed metal closures are manufactured by Owens-Illinois Glass Co., Toledo. Labels are supplied by Lehman Lithograph Co., San Francisco.

Red Rose Jellies Boast New Iced Tea Style Tumbler

Red Rose brand jellies, packed by Adler Food Co., Evansville, Ind., have a new 24-ounce capacity iced tea style tumbler, complete with colorful ACL decoration of cherries and lemon wedge. The tumbler is sealed with a white-coated Anchorvac closure. Spot label is by Muirson Label Co., Peoria, Ill.; tumbler and vacuum cap by Anchor Hocking Glass Corp., Lancaster, O.

Hickory Pit Flavored Sauce Is Packed for Institutional Trade

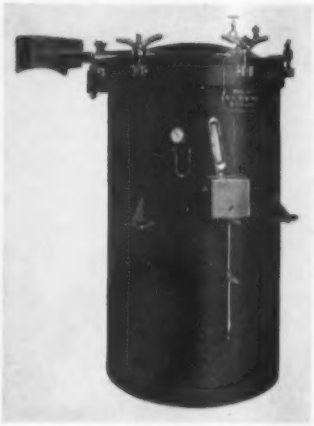
A new hickory pit flavored barbecue sauce, made from a Kentucky recipe and created and tested by Ray Gillum, is being introduced by the *Hickory Mountain Barbecue Co.,

(Continued on page 47)

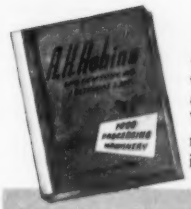
You'll find that *Robins* RETORTS

incorporate all the modern features that promise to keep your production

MOVING!



...and you can be sure that ROBINS CRATES are designed and constructed for extra wear and long, hard service



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Jellies and Confections Because...

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Freezing News

Promotion • Selling • Research

Sunkist Adds Pink Lemonade to Line

Latest addition to the Sunkist line of citrus products is quick frozen concentrate for pink lemonade. Available in the popular six-ounce size tins, it has the same flavor of Sunkist lemonade, and the pink color is obtained from the use of natural grape juice. The new item is packaged in a blue and white lithographed can which attractively emphasizes a large glass of pink lemonade.

During the week ending July 9 surveys revealed that consumer purchases of frozen lemonade were greater than during any previous week in the history of the lemonade business.

Chun-Wong Adds Complete Chinese Dinner to Its Line

Consumer acceptance and demand for frozen Chinese foods has led Chun-Wong, Inc., Los Angeles, to add a complete frozen Chinese dinner to its line. Sold as Wong's No. 1 Dinner, the meal includes mushroom chow mein, fried shrimp, Chinese style roast pork and soy sauce—attractively arranged in an aluminum heat-and-serve divided plate. Gordon Chun, Chun-Wong, Inc., reports that the striking appetite appeal of the 5-color overwrap, designed by the Los Angeles plant of Western Waxed Paper Div., Crown Zellerbach Corp., played an important role in the immediate success of this unique frozen Chinese dinner.

Quick Frozen Whole Berries Are Packed Without Sugar

Individually quick frozen whole strawberries and blueberries, said to be the only ones packed without sugar or syrup, are being marketed nationally this month by Flamingo Foods Corp., Jersey City, N. J. Harry Jones, president, says that tests in several areas indicate an extremely good potential for the new products.

The strawberries, in 8-ounce containers, and the blueberries, in 10-ounce packages, are frozen by a special process which preserves their natural flavor, Jones says. He believes much of their sales appeal is due to the high visibility of the whole fruit, made possible by the clear re-use plastic containers, molded of Monsanto Chemical Co.'s Hi-Flor 55 Lustrex by Wilpet Tool & Mfg. Co., Kearny, N. J.

On-the-Spot Packaging Helps Push Concentrates

Minute Maid has come up with an answer to the retail grocer who wants to push bulk combinations of pure fruit juice concentrates and refreshing ade products.

The grocer selects the combinations he wishes to promote. The Minute Maid salesman does the work—through the use of Minute Maid's patented on-the-spot packaging device, which can wrap any combination of six six-ounce concentrates the retailer selects in handy, locked-in cartons. Pricing is up to the store manager and dependent upon which products he wishes to use.

According to Minute Maid, market testing has shown that average frozen food buying is done on impulse and that the housewife will pick up at least three items at a time.

The Minute Maid packets appear in three tested summer promotions, each with its own premium offer.

Consolidated Foods Acquires American Frigid Dough, Inc.

Consolidated Foods Corp., canner, processor and distributor of foods, has completed negotiations to acquire American Frigid Dough Inc., Chicago processor of frozen bakery products and prepared frozen foods. The announcement was made by S. M. Kennedy, Consolidated Foods president, and Marvin R. Polkow, president of American Frigid Dough.

A new and modern plant in the Chicago area will be ready shortly for occupancy as the new home of American Frigid Dough. Mr. Polkow and Earl G. McAbery, Jr., treasurer and secretary, will continue in their present positions. The company will be operated as a subsidiary of Consolidated Foods Corp. and there will be no change in operating policies.

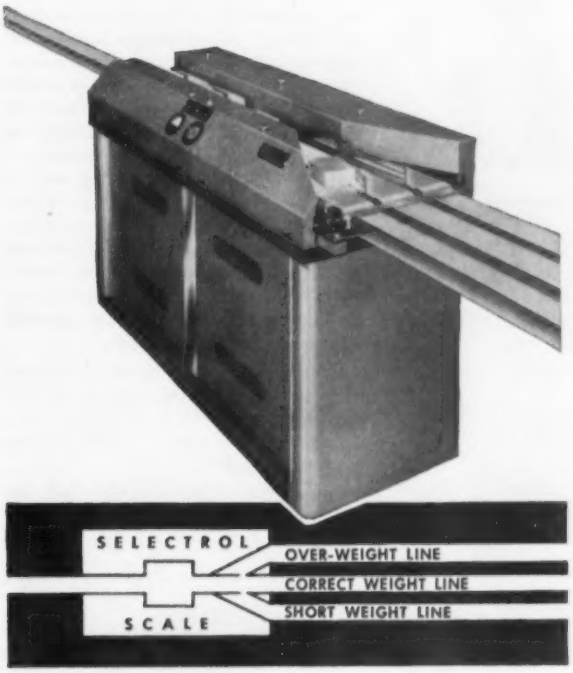
American Frigid Dough distributes frozen prepared bakery goods under the "Frigid Dough" brand and other prepared frozen foods under the "Tic Toc" label. Products are marketed through frozen food distributors and are sold direct to leading chains.

Frozen Asparagus Pack Total Shows Little Change from '54

The frozen asparagus pack this year was 25,318,619 pounds, according to a preliminary tabulation just completed by the National Association of Frozen Food Packers. The 1955 total was not much different from last year's pack of 25,779,827 pounds, but was significantly smaller than the record output of 32,945,017 pounds in 1953.

Regional production followed somewhat divergent trends this year. In the East and South the pack declined about a million pounds, but this was partially made up by production increases in the Midwest and the West Coast. The increase in the West Coast pack was due entirely to larger production in California.

Container-size usage followed a familiar pattern. About two-thirds of the pack went into 10-ounce retail, with most of the remainder in 2½-pound institutional. The pack in 8-ounce size declined to less than a million pounds.



SELECTROL weighs, sorts and counts every package

Operators of food packaging plants are finding SELECTROL the best money-making machine in their operation. It eliminates over-weights—saves product and eliminates human error by automatically weighing and sorting every package.

SELECTROL fits into any production line, weighs in motion, handles your products without spillage, without interruption to flow. Out of tolerance units are smoothly diverted from the line for correction. Immediate labor savings result, since all products meeting your predetermined weight tolerance require no further handling or checking.

SELECTROL tolerances are adjustable. Rejection accuracy can be held to 1 gram at speeds up to 100 packages per minute.

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Exact Weight Scales

Better quality control
Better cost control

THE EXACT WEIGHT SCALE COMPANY

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In Canada: P. O. Box 179, Station S, Toronto 18, Ont.

PROFITABLE WASTE RECOVERY

Link-Belt Liquid Screens clean waste water at large cannery.

...with LINK-BELT LIQUID VIBRATING SCREENS

IF you have valuable solids being lost with liquid wastes, use this fast, sanitary, economical method to salvage them. Link-Belt's liquid vibrating screens are used effectively by canners and packers the country over — for profitable waste reclaiming . . . for reducing stream pollution. Send today for Book 2377, containing full details.

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What's new?

Supplies • Equipment • Trade Literature

New Pickle Cutting Guide Offered by Urschel Labs

An information brochure called "Profitable Pickle Cutting" has just been prepared by Urschel Laboratories, Inc., Valparaiso, Ind., designer and manufacturer of precision, high speed pickle and other food cutting equipment. It is a complete reference guide for pickle packers interested in more profitably producing uniform, quality pickle cuts in all the popular sizes and shapes. A free copy may be obtained by writing the company.

Bulletin on Field Crates Issued

A new bulletin on field crates used in fruit and vegetable harvesting and packing operations has just been issued by Package Research Laboratory, Rockaway, N. J. It deals with Pallet Crates holding as much as one ton, now used widely by both fresh and processing operations, and James Crates, normally available in sizes from 5/8 bushels to 1-1/2 bushels.

The bulletin points out that a typical wirebound pallet crate for beans and miscellaneous vegetables has a capacity of approximately 25 bushels or up to 1500 lbs., measures 30" x 40" x 46", has a tare weight of approximately 100 lbs. and is reported to survive 300 trips from field to packing operation over two seasons. An eastern food processor using these crates reported they enabled him to eliminate the use of one truck and ten laborers in harvesting 190 acres; he reduced his yard crew by more than two-thirds, increased his plant storage area by more than 47%, and reduced his handling costs by 50% or more with these mechanically handled wirebound pallet crates.

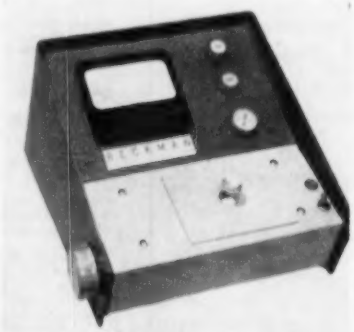
The bulletin is available from the laboratory.

Rex TableTop Now Available in Nylon

A nylon, flat-top conveyor chain called N820 Nylon TableTop Chain, has been placed on the market by Chain Belt Co. It is said to be particularly well adapted to service in dairies, breweries, canneries, pharmaceutical laboratories, and on filling and packaging machinery. The nylon chain has been designed for many special applications—conveying cans, cartons, jars, bottles, vials, and similar materials.

The chain design is essentially the same as standard Rex carbon and stainless steel TableTop, but with many added features. Among these is its ability to operate without lubrication, its exceptional surface smoothness, its light weight and handling ease.

For further information write Chain Belt Co., Dept. PR, Milwaukee 1.



Sugar Colorimeter Simplifies White Sugar Color Grading

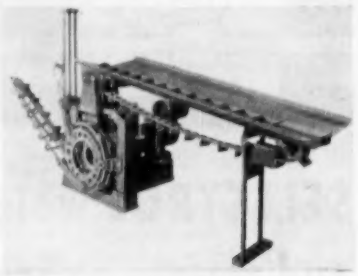
A photoelectric sugar colorimeter designed to speed, simplify, and standardize white sugar color grading by sugar producers and users is now available from Beckman Div., Beckman Instruments, Inc., Fullerton, Calif.

The result of close liaison between the manufacturer and the U. S. Committee on Sugar Analysis, the new instrument will allow refiners as well as bakers, confectioners, ice cream makers, bottlers, canners and packers and other volume consumers of white sugar to maintain sugar color control without specially-trained personnel or heavy investment in equipment.

A small, compact unit for bench, desk or table top operation, the Beckman sugar colorimeter makes measurements at 420, 560 and 720 m,u, so that either the single-reading method at 560 m,u or the double-reading method at 420 and 720 m,u may be used for color-index checks.

Controls and operational procedure are extremely simple. After brief instruction, relatively unskilled personnel can make rapid, precise sugar color determinations.

For further information request data file 55 from the company.



FMC Is Exclusive Agent For Multi-Pak Filler

Automatic filling of whole or French-sliced green beans at capacities up to 15 times greater than those obtained by hand-pack methods, highlight the features of the Carruthers' Multi-Pak Filler, now sold exclusively by Food Machinery and Chemical Corp.'s Canning Machinery Div. throughout the U. S., its territories and possessions, and Canada. Overseas sales will be handled by FMC's export division.

The unique design and positive filling principle employed by the Multi-Pak, provide a continuous operation at speeds up to 70 cans per minute (depending on can size). The gentle, automatic forming and transfer action employed virtually eliminates crushing and jamming of the product.

Mechanical features of the Multi-Pak include a special can chute assembly that prevents improperly positioned cans from entering the machine. A safety device also stops the machine if the supply of cans is interrupted.

Sanitary and durable construction features include stainless steel construction for the feed table assembly and hopper, hard chrome plate brass castings for compression pockets, and hard chrome plated steel for plunger

heads.

Overall length of the machine is 11 ft., 3 in., including a 7-foot assembly table. The Multi-Pak Filler is manufactured to handle one specific can size, including 300 x 407, 303 x 406, 301 x 411 (No. 1 Tall Western) or 307 x 409; change parts must be obtained for each can size.

Additional information may be had by contacting Food Machinery and Chemical Corp., Canning Machinery Div., San Jose, Calif. and Hoopeston, Illinois.

(Continued from page 42)

Inc., Baltimore. The sauce is packed in the 6-ounce size and gallon size for institutional trade. Neck band carries the slogan, "Makes Every Meat a Picnic Treat." Screw caps are by Crown Cork & Seal Co.; glass by Owens-Illinois; labels by French-Bray Printing Co.

° Registered trademark applied for.

Heavy Fall Promotion Planned For Gerber Baby Foods

Strained baby foods will be singled out for heavy promotional support by Gerber this October. Drive will feature the Gerber baby doll, a premium requiring no coupon handling by the grocer. Mother simply detaches an order blank from the shelf strip and mails to Gerber with $2.00 and six Gerber labels.

More than 12,000,000 full-color magazine messages—plus TV's "Ding Dong School" and the Bob Crosby Show—will back the nation-wide drive. Mailings to the medical profession and home economists will also feature Gerber's latest strained baby foods—strained bananas, garden vegetables, fruit dessert, and chicken.

Pink Lemonade Is Popular Hot-Weather Drink

Pink lemonade, the first item to be produced under both Minute Maid and Snow Crop labels, is reported to be one of the hottest sales items wherever it has been test marketed. Snow Crop, with a full line of quick frozen foods, became a division of Minute Maid Corp. in December 1954.

Minute Maid has captured one of the best traditions of the circus in developing a real pink lemonade. But combined with a genuine youngster appeal is healthful lemon juice and other fruit juices.

Pink lemonade is available in a six-ounce concentrate size which will make one full quart of delicious drink. The new product can also be used as a colorful base for mixed drinks.

LEE *headquarters for the Standard and Special Designs*

CORROSION-RESISTANT KETTLES

Available in sizes up to 500 gallon capacity to meet every processing need. Easy to clean and keep clean, they are practical and meet all sanitary regulations. All Lee kettles are available with hydraulic cylinders where your own water line provides the necessary operating power to safely control tilting kettles and tilting agitators in agitator kettles.

Our new descriptive bulletins sent on request.

LEE METAL PRODUCTS CO., INC.

408 PINE STREET, PHILIPSBURG, PA.

ALL LEE KETTLES ARE MADE TO A.S.M.E. CODE

4 GALLON *(Imperial)*
CAN MAKING & FILLING PLANT for sale

BLISS AUTOMATIC PLANT complete for MAKING, FILLING and CAPPING 4-gallon cans suitable for liquid and semi-liquid foods, including olive oil, ghee, water, syrup, etc., solids and powders.

All joints soldered, panelled sides, tops and bottoms. Newman Type Cap. Cans fitted wire handles and cleats. Necessary tools available for producing food cans with air-tight tagger lever lid tops. Complete with all spares, including fillers for liquids.

OUTPUT . . . 20,000 4-gallon cans per 8-hour day.
CONDITION . . . PERFECT

Immediate inspection under ideal working conditions in Wales.

We would divide and sell as two separate units, each with output of 10,000 4-gallon cans per day.

Codewords: One plant, SMBFU;
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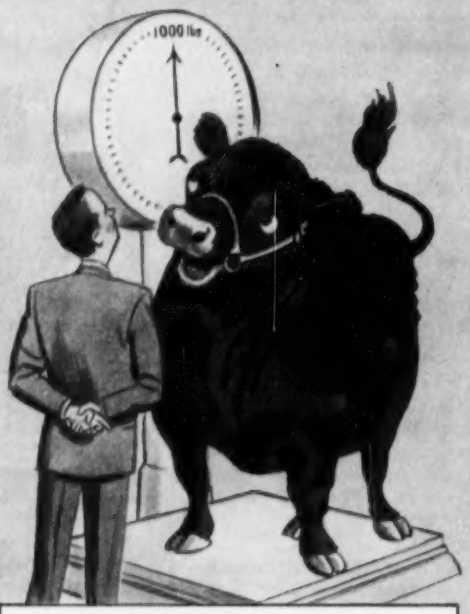
How many pounds are sirloin steak?

☐ 250 lbs. ☐ 150 lbs. ☐ 50 lbs.



The American Meat Institute tells meat packers and housewives how much "eatin' meat" there is in a 1000 pound steer—40 different cuts from a side of beef—how many pounds of hides, hoofs and fats.

"eatin' meat" CIRCULATION

Courtesy American Meat Institute

Experienced space buyers recognize that the entire circulation of a publication isn't necessarily all "eatin' meat" for every advertiser. It's who, where and how that counts, not end figures. Careful study of all available circulation FACTS as related to markets is required to appraise media for its advertising value.

The audited information in A.B.C. reports for business publications includes: A breakdown of subscribers by occupation or kind of business • Location of subscribers by states or provinces • How the circulation was obtained • How much subscribers paid • How much paid circulation • How much unpaid distribution • What percentage of subscribers renew • How many in arrears.

By using audited information from A.B.C. reports as a basis for media decisions, you can most accurately judge media for their value to your business and *know* what you get—how much "eatin' meat"—for your advertising investment. This business publication is a member of the Audit Bureau of Circulations. Ask for a copy of our A.B.C. report and then study it.

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FOR SALE: (1) Niagara #110-20 Stainless Steel Filter 110 sq. ft.; (1) Hope type 18 stainless steel single piston filler; (50) Stainless Steel Tanks from 30 gal. to 10,500 gal. cap. (Some with mixers). (35) Aluminum and Copper Storage Tanks up to 3200 gal. cap. (30) Stainless Steel and Stainless Clad Steam Jacketed Kettles from 40 gal. to 500 gal. (Some with agitators).
PERRY EQUIPMENT CORP., 1405 N. 6th Street, Philadelphia 22, Penna.

FOR SALE: NEW-USED CANNING AND FROZEN FOOD PROCESSING MACHINERY. Advise your requirements. Send list machinery you have to sell. Otto W. Cuyler, Webster, N. Y.

FOR SALE: QUART RINSERS—U. S. Bottlers Machinery automatic rinser, will handle all bottles up to half pints, fifths and quarts; recently rebuilt with new AC motor, style 12-US, capacity up to 60 or more bottles per minute. Real Bargain, f.o.b. western New York plant.
Write Box 79, Food Packer.

FOR SALE: AMMONIA COMPRESSOR—York 10x10 Model DB ammonia compressor used less than two years, erected in Pennsylvania brewery with all accessories, can be purchased separately and at a real bargain.
Write Box 80, Food Packer.

FOR SALE: PACKER—Standard-Knapp Model F packer, with elevator; for packing 24—12-oz. cans per carton; surplus equipment.
Write Box 81, Food Packer.

For Quick Results!

Why not try Food Packer's Classified Advertising Section?

Scholarship Winner

June high school graduate **Robert Matthews** won the $100 **Victor Foods Corp.** scholarship which was established three years ago by the Victor, N. Y. firm as an incentive to students desiring to further their education in the field of agriculture, or who are planning to engage actively in farming after completing the high school course.

Canners Directory

1955

LIST OF THE CANNERS OF THE UNITED STATES

Compiled by NATIONAL CANNERS ASSOCIATION from authoritative sources.

Gives location of firms, their plants, and products packed in each. Full commodity index. Membership in N.C.A. indicated.

Also lists members of the National Food Brokers and Canning Machinery and Supplies Associations.

Sold to the trade at $2.50 per copy, postage prepaid. Personal Checks Accepted

Address all orders to the

NATIONAL CANNERS ASSOCIATION

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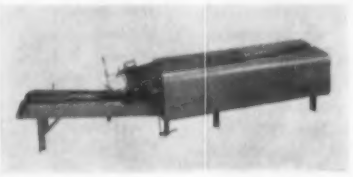

Manitowoc Engineering Develops New Case Packer

Manitowoc Engineering Corp., So. Sixteenth St., Manitowoc, Wis., announces that a new machine titled Manitowoc Case Packer Model 46 has been designed for packing 46-ounce cans in single layer pack.

Model 46 leads the cans in single file to the conveyor chain where a star wheel guides them alternately to one side of the conveyor chain or the other. The natural path of the cans in this action is to the outside rows of the conveyor section. When the two outside rows of the conveyor fill up, the curvature of the last can in each row affords a bumper diverting subsequent cans into the two inside rows.

In announcing the new unit Manitowoc points to the success of their Model 10 which features extreme simplicity and gentleness of case handling and which has packed record averages.

FINE LABELS

ORIGINAL DESIGNS

Gamse

GAMSE LITHOGRAPHING CO., INC.
GAMSE BLDG., BALTIMORE 2, MARYLAND

How They Got There

J. R. Simplot

Idaho's Biggest Booster

J. R. SIMPLOT, the West's famed industrialist, started his now-fabulous career on one of the West's equally famed products—Idaho potatoes. At an early age he saw a big future in growing, packing, and shipping potatoes to the wholesale market, and proceeded to build packing cellars and warehouses to handle this popular food. The potato business expanded rapidly and soon Jack Simplot had facilities located throughout Southeastern Idaho and numerous other places.

Later he became interested in the utilization of off-grade potatoes and onions for the commercial market through dehydration. In 1941, he erected and put into operation a small onion dehydrator near Caldwell, Idaho. Simultaneously, the armed forces were looking for considerable quantities of dehydrated potatoes and onions to feed troops in the United States and possibly, abroad. Consequently, in cooperation with the U. S. government, Jack Simplot expanded the Caldwell dehydration plant. This venture was successful; from 1942 through 1945 he shipped up to 33 million pounds of dehydrated potatoes annually to the armed forces and other government agencies. Also shipped were five million pounds of dehydrated onions to the same sources.

In 1946, he commenced a conversion program at the Caldwell plant and installed canning and freezing equipment. Today, this plant, under the management of Leon C. Jones, a Simplot company vice president, is the nation's largest potato-processing plant and one of the largest producers of frozen french-fried potatoes. (See p. 34, FOOD PACKER, Feb. 1955.) Other fruits and vegetables, including large quantities of corn, that are grown in the fertile Boise Valley, are also processed at the Caldwell plant.

At a durable, dynamic 46, Jack Simplot runs a vast empire that spreads over nine western states and grosses over $30 million annually. Major interests, aside from food processing, take in mining, lumbering, farming and cattle raising, real estate, and housing projects. One of his lumber operations, the Caldwell Lumber Co., near Caldwell, Idaho, was started in 1943 at the time he needed wooden boxes for packaging of dehydrated products. After the war, this company installed a complete planer mill in Caldwell, which is operated in conjunction with its sawmill at Horseshoe Bend. Lumber finished at this plant is now shipped throughout the United States.

During the war years, also, Simplot found need for adequate commercial fertilizers to nourish the growth of crops in Idaho's Snake River Valley. He hired competent geologists who located substantial phosphate deposits on the Fort Hall Indian Reservation near Blackfoot, Idaho. This operation, now known as the Gay Mine, supplies large quantities of high-grade phosphate rock to the Simplot fertilizer plant in Pocatello, Idaho, for use in manufacturing both single and triple phosphate. Moreover, large quantities of phosphatic shales are mined and sold to the Food Machinery and Chemical Co. plant at Pocatello, and to other users throughout the intermountain area.

Jack Simplot has acquired substantial interests in various mining industries, and for the past five years has been actively engaged in the exploration, development, and mining of uranium ores in the Colorado and Utah areas.

Also in recent years he has been active in the search for rare earths, principally monazite, obtained from deposits located north of Boise in the Cascade vicinity.

In addition to the Caldwell food-processing plant, Simplot food interests include the Shelley Processing Co., Burley, Idaho, where granular potatoes and split pea soup are canned and dehydrated; the J. R. Simplot Co., Shelley, Idaho, a company which is an exclusive manufacturing agent for R. T. French, and makes instant potato granule from French's own special formula; and the Idaho Products Co., Jerome. Here are manufactured potato starch and glucose, and modified starch. A new, highly refined starch product is being manufactured for use in the food industry.

He continues to operate the Simplot Produce Co. with principal offices in Burley, and the Simplot Western Idaho Produce Co. in Caldwell. Both produce companies ship some 5,000 cars annually of raw potatoes and onions to the wholesale trade.

Jack Simplot rules this scattered empire from offices in the Continental Bank Building (which he owns) in Boise. He operates without benefit of a board of directors or outside stockholders. He is president and owner. He has several key men at Boise, and division and plant managers in his plants. They operate pretty much on their own—as long as they make money.

Although he maintains good phone and teletype contacts with his far-flung operations, often these means of communication are not enough for Jack Simplot. He owns two planes and can pilot them himself, although he has a competent pilot to speed him on his rounds. He computes air mileage in hundreds of thousands of miles.

Although you would expect Jack Simplot to be a native son of Idaho, he isn't. He was born in Dubuque, Iowa, January 4, 1909. His parents, however, soon moved to the area around Burley, Idaho, and later to Declo, Idaho. Jack grew up on a farm, where potatoes and other crops common to Cassia County were grown.

He presently resides at 1500 Harrison Boulevard, Boise. His wife, Ruby A. Simplot, was born in Glenns Ferry, Idaho, and has been a lifelong resident of the state. They have four children: Richard R., Donald J., Gay Corinne, and Scott Robert. He owns a 200-unit apartment development in his home town, another unit in Pocatello, a subdivision in Boise, and apartments and offices in other cities and areas.

Aside from his own enterprises, he is actively engaged in a number of other projects. For the past year Jack Simplot has been chairman of the board of trustees of the College of Idaho, an institution that is heavily endowed by J. R. Simplot himself. He is very proud of the school. He is an active director of the Idaho Power Co., First Security Bank, and of numerous other companies located in the Idaho area. He's a firm booster for Idaho, and progress is his foremost thought.

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BALL TECHNICAL SERVICE

can help you
cut costs, improve quality

Ball customers receive not only quality glass containers and metal closures that meet their most exacting specifications, but also—on request—counsel from experienced technicians on any production problem. Here are some of the many ways our staff of specialists may be able to assist you:

- Determining the types of machinery and equipment best adapted to processing and packaging your products.
- Improving your present processing methods.
- Increasing your production flow and line capacity.
- Choosing the kind of glass container to give your products the greatest possible sales appeal.

A CASE HISTORY

Production costs were getting out of hand for a midwest pickle packer. He had been advised that the only solution was a major investment in new machinery, but this was beyond his means. Early in 1954 he called in Ball Technical Service, which outlined a plan for completely rearranging his lines using most of the existing equipment and the labor of plant maintenance personnel. With a relatively small outlay for materials, he doubled his output and cut production cost per unit almost in half. Sounds fantastic—but it's true! Another case where it paid to call Ball first of all.

Ask about other Ball "Packaging Plus" services . . . glass container design; materials handling; packaging research; processing and filling—with experts in each area who can help you reduce costs or increase profits.

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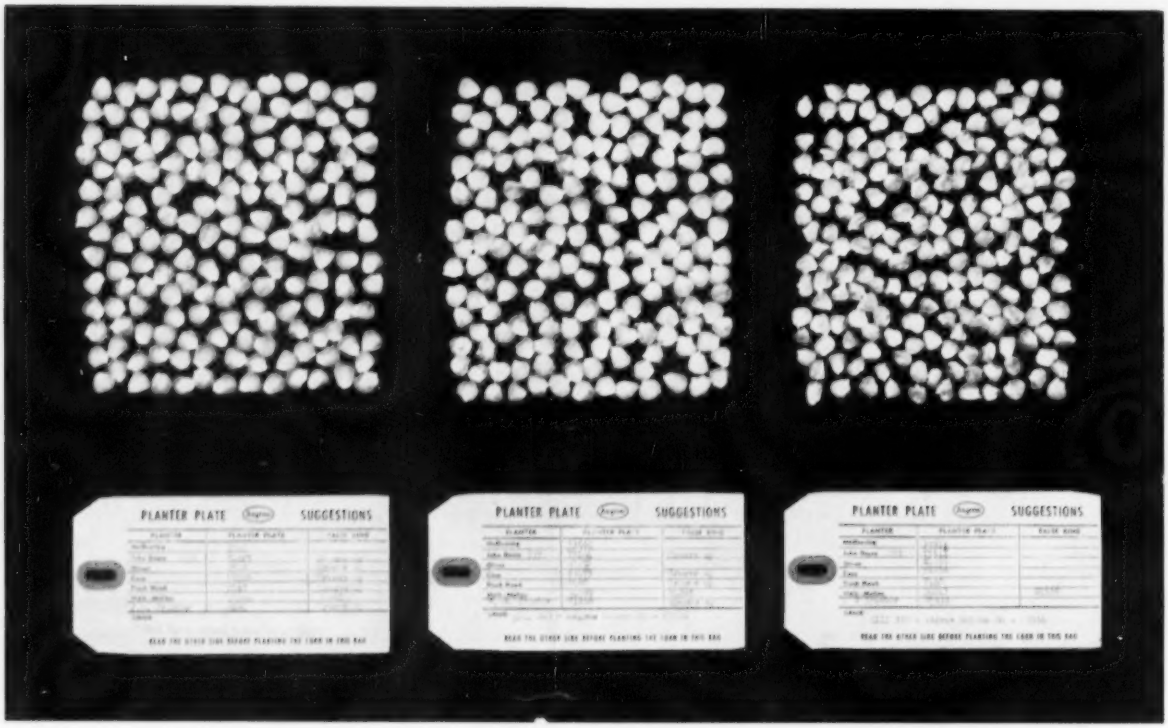
Uniform Grading for Corn Seed



ANOTHER ASGROW EXTRA

Typical examples of Asgrow precision-sized sweet-corn seed. Note the extreme uniformity of size and shape within each grade. The variety is Asgrow Golden 50, of outstanding quality for processing.

for accurate planting • better stands • uniform maturity

Asgrow corn seed is carefully separated by width, thickness, and where necessary, length, into uniform sizes, to give greater planting accuracy than ever before.

No more guesswork at planting time. Each bag of Asgrow corn seed has a tag (shown above), giving planter-plate instructions.

Asgrow

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Food Packer

Canning Glasspacking Freezing

Mid-Month

NEWS LETTER

September 15, 1955

Initial plans for the 49th annual exhibit of the Canning Machinery & Supplies Association to be held in conjunction with the **National Canners Association** Convention in Atlantic City, Jan. 16-21, 1956, have been announced. Theme of the 1956 exhibit will be "The Canning Industry's Greatest Show on Earth." In line with this theme, exhibitors will show their newest and most streamlined canning equipment, while firms stressing service will concentrate on efficiency. The Exhibit this year will extend through three days—from Thursday, Jan. 19, at 9:30 A. M., to Saturday, Jan. 21, at 5:00 P.M. Thursday and Friday closing hour will be 5:30 P. M. Technical conferences, designed particularly for research, engineering, and production personnel of canning companies will be repeated by popular demand.

Social functions, as in the past, will include the CM & SA Past Presidents' Dinner on Wednesday, Jan. 18, at 7:30 P. M. On the same date the **Forty-Niner** Board of Directors meeting takes place at 4:00 P. M., followed by the membership meeting, the annual Service Award ceremony, and the Forty-Niner reception. The **Old Guard Society** cocktail party and buffet supper is scheduled for 6:00 P.M. either at the Claridge or Shelburne. The date is not yet set, but will be either January 19th or 20th. The **Young Guard** party will be held on Friday, Jan. 20 at 7:00 P. M. in the Traymore Hotel's American Room. The annual CM & SA party for canners and their wives will be held on Saturday, Jan. 21. This year the event will be a formal dinner dance, a change-of-pace from the Captain's Dinner and Caribbean Cruise which have been features of recent Atlantic City canners' conventions, and will be held in the main ballroom of Chalfont Haddon Hall. This year there will not be a Sunday Evening Musicale since most canners will be leaving Atlantic City Sunday, Jan. 22.

National Food Brokers Association has just introduced a new "Idea Exchange" for its members, according to **Watson Rogers,** NFBA president. The aim of the program is to compile a summary of the new and helpful techniques, programs and other ideas developed by member food brokers for use in their own businesses. "With the continued switch on the part of manufacturers to the use of the food broker method of selling, there is a continuous need to develop and adopt improved methods to perform this added responsibility," the president said. "A steady increase in operating costs is another stimulus to his developing ideas and techniques which may result in controlling costs. The whole design of this program is to help every broker assume his responsibility to the food industry of maintaining his sales effectiveness at its peak."

A stepped up program to promote canned Bartlett pears in the restaurant-institutions field is announced for 1955-56 by **Pacific Coast Canned Pear Service,** an organization representing the Bartlett pear growers of California, Oregon, and Washington. Extensive advertising in publications will start in October. This is the third consecutive year that the three states have joined in a concerted collective program to promote canned Bartlett pears.

Popcorn sales history is expected to be made beginning October 1 when the third annual Fall Popcorn Festival is launched by **The Popcorn Institute** and manufacturers of food items and beverages, and trade associations related to popcorn, according to **William E. Smith,** executive director of the Institute, which maintains offices at 333 So. Michigan Ave., Chicago. The grocery trade will be alerted to the giant promotion through personal contacts by the Institute staff and through a series of mailings outlining the details of the program. Releases will be sent to food editors of newspapers and radio and television stations across the country. Related food and beverage manufacturers are going all out to further assure the success of the program. Among these are the **Morton Salt Co., Wesson Oil Co., Coca-Cola,** and **Brer Rabbit Molasses. Can Manufacturers Institute** will supply photographs and new, easy-to-use recipes featuring popcorn to newspapers, Sunday supplements, and women's service books and shelter books. CMI will also supply specially prepared radio and television scripts to 162 television stations and 321 radio stations for use by food demonstrators and home economists on local and network programs.

Olive fans the country over will be observing National Green Olive Week, September 22 to October 1. A national publicity program in top magazines, daily newspapers, and on radio and television will present green and pimiento stuffed olives to Mrs. Consumer in recipes, photographs and stunts. The **Green Olive Commission** is urging grocers to stock up on green and stuffed olives for the Week.

Plans for the construction of one of the most advanced food research facilities in the world, a new Heinz Research and Quality Control Center, have been announced by **H. J. Heinz II,** president of **H. J. Heinz Co.** The new structure, to be built at a cost of $3,000,000, will be constructed at the company's Pittsburgh headquarters and will serve as the research and development center for the domestic and international operations of the Heinz Co. Construction work is expected to begin late in September and target date for completion of the seven story building is January 1957. The new center will contain a pilot plant, experimental kitchens, research laboratories, quality control laboratories, and the scientific library, as well as executive offices for the worldwide operations of the company.

A new variety of spinach called Early Hybrid 7 has been developed by the **U. S. Department of Agriculture.** Resistant to blue-mold and blight, it is semi-compact, dark green, and grows upright, which makes it easier to harvest by machine. Seed of the new variety will be available in limited quantities for commercial planting this fall. Early Hybrid 7 was tested by the **Texas Agricultural Experiment Station.** In southern Texas and in the Arkansas Valley of Arkansas the new variety yielded 13.5 to 19.6 tons an acre as a fall crop and 9.7 tons in the spring. This compares with 5.2 to 14.8 tons for standard varieties in the fall and 3.7 to 7.1 tons in the spring.

Financial News: Reynolds Metals Co. and its wholly owned subsidiaries made an all-time high consolidated net profit of $16,236,416 for the first six months of 1955. Profit was after provision for income taxes of $16,425,754 and is equal to $8.07 per share on the 2,010,733 shares of common stock outstanding at the end of the period. It compares with a profit of $9,607,766 or $4.78 a share reported for the first six months of 1954 on the basis of the same number of shares outstanding. Profit for the first six months of 1955 was a 69 percent increase over the same period in 1954. Net sales of the company rose to $183,973,937 for the first six months

of 1955, which was an increase of 29 percent over the $143,007,250 reported for the same period last year . . .

Sales of $58,807,618 and a net profit of $1,369,025 during the fiscal year ended May 31 were reported for the **Dole Hawaiian Pineapple Co.** in the annual report to stockholders and employees. Net sales for the year compared with $60,089,711 in the 1953-54 fiscal year, which were the highest in company history. Net profit was $1,877,402 in the previous fiscal year. Earnings were 92 cents per share, compared with $1.26 in 1953-54. Dividends totaled 80 cents per share, the same amount paid in the previous year . . .

The following food brokerage firms have recently been accepted into membership in the **National Food Brokers Association: William Wadenpohl Co.,** 427 W. Erie St., Chicago 10; **Pedigo-McMeekin Food Brokers,** 831 N. 19th St., Birmingham, Ala.; **Henry M. Samplin Associates, Inc.,** 100 Hudson St., New York; **Flick-Byrne, Inc.,** 1857 Northwest Blvd., Columbus 12; **Stoddard Sales Co.,** P. O. Box 33, West Hartford, Conn.; **Bennett Brokerage Co.,** 2302 Barnard St., Saginaw, Mich.; (Branch of Baltimore) **W. H. Bryan & Co.,** 3432 Connecticut Ave., N. W., Washington 8, D. C.; **Sims Brokerage Co.,** 477 W. Boundry St., Savannah, Ga.; **Head-Hilleary, Inc.,** 1001 W. Main St., Louisville, Ky.; (Branch of Baltimore) **Chaimson & Robinson, Inc.,** 509 Rhode Island Ave., N. E., Washington 2, D. C.; **Clyde E. Houck Co.,** 96 Oak St., Forty-Fort, Pa.; **Donald R. Tinsman Co.,** 510 Telegraph Bldg., Harrisburg, Pa.; **Williams Brokerage Co.,** POB 1494 Edgewater Br., Denver 14; **Otto L. Kuehn Co.,** 4065 N. 35th St., Milwaukee 16; **Edwards-Hunt Co., Inc.,** 204 Stuart St., Boston 16; **Mitchell-Webster, Inc.,** 4030 Chouteau Ave., St. Louis; **Paul Pankey & Co., Inc.,** 2413 1st Ave., N., Birmingham, Ala.; **Woodward-Davidson Co.,** 418 So. 9th St., Boise, Idaho; **Shackelford Brokerage Co.,** 3202 Lamar Ave., Houston; **E. W. Pyburn & Son,** 613 So. Morgan St., Tampa, Fla.; **Devaney-Guffer Brokerage Co.,** 331 Railway Exchange Bldg., Kansas City, Mo.; **W. R. Bruce Co.,** 206 Brokers Exchange Bldg., Norfolk 10, Va.; **Boyer Brokerage Co., Inc.,** 5121 N. Eagle Rock Blvd., Los Angeles 41 . . .

New York State Canners and Freezers Association, Inc., announces the election of **Andorn, Bergida and Danks, Inc.,** Long Island City, N. Y., food broker, as an associate member of the Association . . . **Hunt Foods Export Corp.** has purchased **Lealand Co. Ltd.'s** food processing plant at Tilbury, Canada. The first Hunt production facility to be located in Canada, the Tilbury cannery will provide Hunt-labeled tomato products for the Canadian market. **R. E. Greenlee Jr.** will direct operations at the new plant . . . The **Fall River Canning Co.,** Fall River, Wis., announces that **John H. Miller** has joined its sales staff. Mr. Miller has been with the company in an administrative capacity for the past 14 years . . . **Frank J. Daniels** has been appointed advertising manager for **Durkee Famous Foods Division** of the **Glidden Co.,** succeeding **Elmer L. Weber,** recently named general sales manager . . . **William J. Hoelle,** assistant West Coast division sales manager for **Minute Maid,** has been promoted to chain store sales manager for **Hi-C** products effective September 1 . . . **D. Floyd Shaffer** has been named manager of **H. J. Heinz Co.'s** newly consolidated Buffalo sales branch, succeeding **Percy W. Olson,** who will manage the firm's Johnstown office . . .

The Larsen Co., Green Bay, Wis. food processor, has purchased the Fox Valley Canning Co. of Hortonville, Wis. The plant will be operated as a subsidiary under the name of **Fox Valley Canning Co., Division of The Larsen Co.** All Fox Valley Canning Co. officers and directors have resigned with management personnel being replaced by Larsen. **Paul W. Steinert,** former manager of Larsen operations at Kent City, Mich., has been appointed manager at Hortonville. **Don Quallman,** former assistant manager of field department operations at Larsen's Fort Atkinson, Wis., plant, heads the agricultural department at Hortonville . . . **American Can Co.** has broken ground at Arlington, Tex. for a new can factory to help meet the container requirements of central Texas' expanding food industry. Production will start during 1956 . . . **Ho-Maid Frozen Foods Co., Inc.,** Warehouse Point, Conn., has appointed **John M. Walton Co.,** Hartford, Conn., its broker for western Massachusetts and Connecticut.

Snow Crop Sales Div., Minute Maid Corp., announces the appointment of **Robert Schmitt,** former sales supervisor in the Milwaukee district, to Minneapolis district manager . . . **Joseph T. Harmuth Jr.** has been named assistant to the president of the **Home Packing Co.,** Toledo, Ohio . . . **John T. O'Leary,** formerly with **Fred Meyer, Inc.,** Portland, Ore., has been appointed west coast district manager of **SeaPak Corp.,** St. Simons Island, Ga., packer of frozen seafood. He will make his headquarters in San Francisco . . . Erwin, Wasey & Co., Ltd., Los Angeles, has been appointed advertising agency for **Carnation Co.'s** new frozen foods division . . . **Douglas M. Johnson** has been named assistant manager of sales in **American Can Co.'s** Pacific division headquarters in San Francisco. Mr. Johnson, who has been with Canco since 1946, formerly served as district sales manager for the San Francisco area . . . **Frank J. Campbell** has been named manager of lithography of **Crown Cork & Seal Co., Inc.** He will make his headquarters at the can division, Philadelphia . . .

Ernest H. Russell, 64, vice president and director of the U. S. Printing & Lithography Co., died August 12 in Erie, Pa. after a brief illness . . . **Gordon Hill Kellogg,** 71, former vice president of **American Can Co.'s** central division, died August 21 at his Chapel Hill, N. C. home . . . **M. P. Cortilet,** 59, vice president of **American Can Co.'s** central division and **Food Packer** Man-of-the-Month (May 1955) died suddenly August 27 at his Chicago home.

Your Food Packer NEWS LETTER
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